From boatanchors@theporch.com Wed Jan 8 01:42:50 1997
From: Sandy W5TVW <ebjr@worldnet.att.net>
Subject: "Boat" BA for grabs.
Message-ID: <19970108032223.AAB20439@LOCALNAME>

Anybody have any interest in a working SBA-312 100 watt transceiver? Will trade for something or sell it. Any interest?

73,
E. V. Sandy Blaize, W5TVW
"Boat Anchors collected, restored, repaired, traded and used!"
417 Ridgewood Drive,
Metairie, LA., 70001
ebjr@worldnet.att.net
Looking for: Hallicrafters SR-75, 860 tubes
Butternut HV2V antenna, G-R test gear.....................*

From boatanchors@theporch.com Wed Jan 8 12:04:14 1997
From: berg stephen erik <z931086@corn.cso.niu.edu>
Subject: Re: Admiral (BA Radio Maker)???
Message-ID: <Pine.3.89.9701080939.A2491-0100000@corn.cso.niu.edu>

As I understand it, Admiral made some of the Lafayette Radio ham and swl equipment. They used to have a plant up in Harvard Illinois, and I think they had an appliance plant in Galesburg Illinois. I do not know where they went, and have not heard anything about them recently. One of my friends worked in the Harvard plant.

73,

Steve WA9JML

z931086@corn.cso.niu.edu

From boatanchors@theporch.com Wed Jan 8 01:42:50 1997
From: "Manuel A. Maseda" <mmaseda@gte.net>
Subject: Almost free Collins 618S-1A
Message-ID: <32D2FF1B.5040@gte.net>

I have a Collins 618S-1A tranceiver that I have no need for. This is an aircraft AM/CW 2 to 25 mhz radio. It is in excellent condition and I have a complete set of original USAF / Navy manuals (operation, service, technical, overhaul). I will let someone have it for just the shipping cost. Anyone interested just send me a message as to why you want it and what you plan on doing with it. Based on all the responses I will decide on Friday who gets it.

Good Luck,

Manuel WF1J

P.S. I only have the transceiver. I don't have the dynomotor, control head, or mount.

From boatanchors@theporch.com Wed Jan 8 01:42:50 1997
From: "Ray L. Mote" <rmote@rain.org>
Subject: Re: ARC-5 phase-out date
Message-ID: <Pine.SUN.3.95.970107173758.21231B-100000@coyote.rain.org>

Not sure exactly when that occurred. Fred Raper has run across various racks and/or control boxes, though, with Navy refurb dates in the early Eighties on 'em! That's a looooooong time in service.

73.....Ray Mote, K5FKT <rmote@rain.org> Oxnard, CA

From boatanchors@theporch.com Wed Jan 8 12:04:14 1997
From: Bill Turini <turinib@wdni.com>
Subject: BA Coax switches for sale
Message-ID: <199701081716.AA10299@interlock.wdni.com>

Spring cleaning has started and I have found some genuine BA coax switches that are surplus to my needs. All work excellently and all are in very good shape. All have nameplates. Prices include shipping.

3 ea Transco 1 pole 4 pos. N connector Type M-1460-4
1 ea Transco SPDT (looks new condition) N connector
     Type M-1460-H20

other coax (not exactly BAish)

Dow-key model 78-6N-54, 6 position N connector rotary

B&W model 565 6 position coax switch - UHF connectors

All are $25 ea, shipped.

Also have

2 Nicolet Oscilliscope Probes, X1
DC - 20 Mhz
1.5 Meter cable
With
    insulating tip
    sprung hook
    BNC Adapter
    I.C. Tip

These are new, unused, in original pouch. Asking $12.50 shipped.

73's

Bill

```
Bill Turini   KA4GAV/7                     turinib@wdni.com
h (360) 825-1167                           w (206) 924-5890
<  ------------------------------------------------------- >
<  Always looking for Signal/One equipment, accessories,   >
<  documentation, parts, etc.                              >
<  ------------------------------------------------------- >
```

From boatanchors@theporch.com Wed Jan 8 01:42:50 1997
From: hagelin@magi.com (Richard Brisson)
Subject: Re: Barnes & Noble / Janes
Message-ID: <199701080314.WAA19887@infoweb.magi.com>

Here are some quick numbers on the ones I ordered from B&N:

Item #		
A117252	Jane's Military Communications 92/93	49.95 USD
A117276	Jane's Security & CO-IN Equip 92/93	29.95 USD

B&N Toll Number: 1-800-THE-BOOK

Hope this helps !

Richard.

P.S. Thanks to some great help from Mike Rowlands and others, I was able to capture my first signals on the RACAL RA-17L ... not bad given that both Khz and Mhz tuners were initially seized, parts of the housing was stuffed with fiberglass insulation, etc !
Now to address a few cosmetic issues ... on the receiver that is ! Like the

```
     SK10 and PL10 (Mains Input Mk IV fixed and free) 3-pin knobs ... the
     bakelite has disintegrated.
```

```
From boatanchors@theporch.com  Wed Jan  8 01:42:50 1997
From: Mikhael Brown <mikhael@hpcmmp13.sj.hp.com>
Subject: BC-610 History & Information
Message-ID: <199701080215.AA002329750@hpcmmp13.sj.hp.com>
```

Looking for any sources of information on the BC-610. I know some of the basics, but am looking for more indepth information. Are there any good articles out there? Has anyone put together a list of know serial numbers and manufactures like I have seen done with R-390s? Any help would be greatly appreciated.

Thanks and 73's

Mike

--
N6WIG
mikhael@hpcmmp13.sj.hp.com

```
From boatanchors@theporch.com  Wed Jan  8 12:04:14 1997
From: Steve Rodowicz <srodowic@ix.netcom.com>
Subject: Collins TV36, 2 Meter Transmitter
Message-ID: <1.5.4.16.19970106211134.3707cf6c@popd.ix.netcom.com>
```

Anyone familiar with this, interested in comments on oerformance & current pricing?
Unfortunately, I havrn't bought the "Collins Guide" yet.

Club I belong to has one that it is looking to sell.

Thanks & 73, Steve - N1SR

```
From boatanchors@theporch.com  Wed Jan  8 12:04:14 1997
From: rdkeys@csemail.cropsci.ncsu.edu
Subject: Re: Command Set Corpses
Message-ID: <9701081820.AA118217@csemail.cropsci.ncsu.edu>
```

>
> While it's true that anything approaching an intact Command set should be
> retained and perhaps restored, there are an incalculable number of
> stripped-down Command chassis (I have one that was cut in half lengthwise
> for inexplicable reasons) minus inductors, caps, and so forth. Anybody who
> really wants to build a radio in a Command chassis should look for one of
> these. I see one or two every hamfest. Two 807s or 1625's in parallel can
> make a potent signal, and the box is certainly big enough.
>

We all agree on it being a good idea to maintain the quality pieces, if possible.

But, hulkers make great cannon fodder for general BA/GB playing and partial or complete restoration or depot level shack parts resupply.

Some points for consideration in the stripped command set hulk end of the art and craft.....

1) SAVE all the itseybitsey screwsies so they DON'T get lostsies. I keep a prized vial of those tiny screws that are forever getting lost. They are priceless unobtanium commercially. The hardware boyz have very quizzed looks on their faces if you approach them for such screwsies.

2) SAVE the underchassis keying relays, if not for yourself, for other's restorations and replacements.

3) The HULKS make great vfo's using all three tubes at 90 volts or so, or pulling out one final tube or even both and coupling appropriately. They make a great way to use a previously converted rig that would be rather difficult to totally restore. If the coils are gone, just couple out of the finals from the rf choke with maybe 100pf of good coupling cap, after disconnecting the underchassis final tank caps. If the tanks are there, but the antenna coil is gone, just wrap two turns of wire around the base of the coil, or use the small adjustable link. If the rig is a 4-5.3 version, just tune the padder caps in the oscillator down into 80m (likewise for the 2.1-3 hulks for 160m). Remember the old central electronics arcusfivus exciter vfos for their early ssb gear.

4) The receivers, if at least minimally operational as hulks make GREAT MONITOR RECEIVERS.

So, even hulkers are great resources. Classic canoeiron!

The three intact ones I have are only minimally touched to allow operation (the mod is floating about --- namely only 1 --- unsoldering the antenna relay wire and wrapping the antenna relay contact around to make solid contact). Then after adjusting the keying relay to sequence properly, keying the oscillator before the final, they are cadillac rigs, As Is. They will QRQ with the tentec boyz, and sound as good as any sort of kenicomiyasiwhooie sandbox rig. For more details, see Dave Stinson as I guess he is the info resource for the rig now.

But Hulkers are great as a qrp rig, a spare vfo, and the receivers are not half bad used as they were designed to be used, and bearing in mind they are rather broad in the selectivity category (but hot as hell in sensitivity). Also the receivers make GREAT MONITOR RECEIVERS (all hands should always be monitoring their signals independently of sidetone, right?). Especially so on boatanchors, glowebugges and the like, right? A three inch antenna works quite well on qrp gear, and no antenna at all on biggie BA iron. Also, as monitor receivers, the plate supplies can be almost anything from 90v to 220v dc. It is highly uncritical --- only need enough plate voltage to make the bfo oscillate sufficiently, and provide enough audio output through suitable transformer to the station audio line.

One point to seriously consider in picking up a used set of unknown origin --- CHECK THE TUBE FILAMENT WIRING. I blew a complete set of tubes totally in their filaments by taking what looked like a pristine unmodified set and runing 24 volts on the filaments with the dynamotor. Alas, a previous owner had very precisely, and with perfect manufacturing and technical skill, rewired the 24 volt filament string for 12 volts. It looked perfectly original at first glance. Everything else was in place, untouched. That hurt.

Anyways..... ol' Dave Stinson is the resident ArcusFivus Guru, on the lists, and methinks we should have another ArcusFivus weekend on the BA/GB QRG? Any takers? How many folks can get one up for the watch? The arcusfivus rigs make great companions for the glowebugges about. How many can get an original rig up on dynomagicmotorpower? Them thar rotating machinery thingies has a fine and classic BA/GB smell to them as the bearings warm up and a tiny touch o' ozone emanates, wid dat fine whirr in the background qrm....... ahh, ain't if fun.....(:+}}......

73/ZUT DE NA4G/Bob UP

From boatanchors@theporch.com Wed Jan 8 18:47:36 1997
From: Ho4bart@aol.com
Subject: Re: Command Set Corpses
Message-ID: <970108123154_644528276@emout19.mail.aol.com>

In a message dated 97-01-08 11:57:10 EST, rdkeys@csemail.cropsci.ncsu.edu writes:

<< rotating machinery thingies has a fine and classic BA/GB smell to them >>

a moderate chirp and dynamotor ripple lends realistic character
to a historic B/A rig's signal. let the machines that communicate
with ea other at 14.4/28.8/56 kb have a perfect T9 note.
wonder if i could get a special event call for my DTW spark rig?
hue miller

From boatanchors@theporch.com Wed Jan 8 18:47:36 1997
From: jproc@bellglobal.com
Subject: Re: Command Set Corpses
Message-ID: <Chameleon.4.01.2.970108162624.jproc@>

>Alas, a previous owner had very precisely, and with perfect manufacturing
>and technical skill, rewired the 24 volt filament string for 12 volts.
>

Bob raises a good a point here. It only takes two wiring changes to convert
from a 24 volt to a 12 volt filament string in the ARC5 transmitter. Anyone
competant with a soldering iron can do a decent job and it's nearly
invisible.

Regards,

Jerry Proc VE3FAB
E-mail: jproc@bellglobal.com
Radio Restoration Volunteer
HMCS Haida Naval Museum
Toronto, Ontario

From boatanchors@theporch.com Wed Jan 8 18:47:36 1997
From: rdkeys@csemail.cropsci.ncsu.edu
Subject: Re: Command Set Corpses
Message-ID: <9701082353.AA118516@csemail.cropsci.ncsu.edu>

>
> >Alas, a previous owner had very precisely, and with perfect manufacturing
> >and technical skill, rewired the 24 volt filament string for 12 volts.

> >
>
> Bob raises a good a point here. It only takes two wiring changes to convert
> from a 24 volt to a 12 volt filament string in the ARC5 transmitter. Anyone
> competant with a soldering iron can do a decent job and it's nearly
> invisible.

True, but PLEASE be careful that you check it out BEFORE you apply power.
I thought it was original, and did not check it out except cursorially.
Alas, upon power up at 24vdc, it blew a complete set of glowentubies
in the glint of an eye..... or glow of a filament..... that hurt --- ouch!

> Regards,
> Jerry Proc VE3FAB

Regards, Bob/NA4G

From boatanchors@theporch.com Wed Jan 8 01:42:50 1997
From: "L. Mark Pilant - MS:ZK03-4/Y02 DTN:381-1529" <pilant@seesaw.ENET.dec.com>
Subject: Re: CV-591 knobs source found
Message-ID: <9701080242.AA07585@us2rmc.zko.dec.com>

Oops here. The url should be:

http://falls.igs.net/~testequipment/

NOT

http://fallsigs.net/~testequipment/

I missed the dot between the falls and igs. I apologize for any confusion
I caused.

73

- Mark N1VQW

From boatanchors@theporch.com Wed Jan 8 18:47:36 1997
From: don merz <71333.144@CompuServe.COM>
Subject: Disassembling FB-7 coils
Message-ID: <970108185613_71333.144_DHB57-2@CompuServe.COM>

Does anyone know how to take apart the National FB-7 coils? These are the ones
with the finger pull ring on the front with the body enclosed in a plastic
tube. I can hear a bunch of loose pieces rattling around in there and I'd

like to fix this coil but have no clue how to get into it. Any help appreciated.

73, Don

From boatanchors@theporch.com Wed Jan 8 21:53:05 1997
From: azoth@netcom.com (Az0th)
Subject: Drakes FS & Collins WTB
Message-ID: <199701090340.WAA08719@netcom6.netcom.com>

Hiyall,

No, no, not me! I'm keeping all my lovelly Drakes _and_ my Collins bits.

But, I seem to remember somebody or other here wanting to buy some Drakes, so I offered to post a FS for a local buddy of mine, Dr. Govind Rao. Please respond to him directly at grao@umbc.edu. He's bought three C-lines and has decided he only needs two, go figure, so one's on the block.

R-4C SN 27k+ no NB, has 500 Hz filter, calibrator
T-4XC SN 25k+
AC-4/MS-4/Manuals

They're in good shape overall, but need a good cleaning. Sounds to me like they've been in storage a while, so probably need DeOxiting as well. He's asking $450 plus shipping, but will dicker. He's also got a Kenwood SW2000 wattmeter for $85, and possibly a D-104.

He's looking for a crystal pack for his S-line, and a 500 or 300 Hz CW filter for his 75S-3B.

Long day, but I gotta mention: Paul K4MSG gave me a prototype of his Lightning Bug compatible Slo-Bug widget to try over the holidays, and if anything it works even better than the other model. My Lightning Bug seems to have a slightly wider range of useful adjustment than my Slo-Bug equipped Blue Racer, and both are now within range of my staggering fist, so I'm a happy camper. Slo-Bug "L": ask for it by name! ;)

Also: picked up a 23rd ed. Radio Handbook at the local B&N. Thanks for the tip, guys. I thought the 22nd was the last there was.

73 de KF4FJH - RF Buchanan

From boatanchors@theporch.com Wed Jan 8 12:04:14 1997
From: WalterLP@aol.com
Subject: F/S NC-101X
Message-ID: <970108071615_1325106840@emout17.mail.aol.com>

As I approach retirement I realize that I can't keep everything.

I'd like to find a home for an old friend, an NC-101X that is in very good condition.
I got it from the estate of the original owner around 1970, and it was purchased originally around 1938.

It is in working condition and looks real good. it has all the original knobs, dials   etc, and there's nothing broken, bent, or inoperative.

The price is $400 cash, as is, where is, and is not negotiable. The new owner will
decide on the method of shipment. Frankly, I'd encourage a direct pickup, but I'll
definitely go the "extra mile" to insure its receipt in-one-piece. This baby weighs a bit over 50 pounds!

I have very recent photographs that I will be happy to provide to any serious buyers,
and will provide a much better written description also. I'll be glad to answer any questions that I can.

If you're interested, please contact me via E-mail at: w2jdh@aol.com
(NOT   through boatanchors). I live near Daytona Beach, Florida if you're considering pick
up. Please let me know your postal address if you want further info.

If you're not interested, but know of someone who might be, please pass this   offering along to them. The money is secondary. I think it's important to preserve   these old classics, and what better place to find it a new home than boatanchors?

Walt Petersen,
W2JDH

From boatanchors@theporch.com Wed Jan 8 21:53:05 1997
From: the-radio-doctor@juno.com (Rob D Long)
Subject: Fox Tango newsletters
Message-ID: <19970108.091500.9942.0.the-radio-doctor@juno.com>

Hello All, I hope this will not be considered off-topic. Considering the rig is from the mid 70's and it does have a few tubes......

I recently Picked up a Yaseu FT-101E, Ordered an AM filter and what was said to be a Full set of Fox-Tango Newsletters, Well it wasn't a full set! Does anyone here on the list happen to have any of these? I would like to complete the set! but more importantly one of the Key years for 101 mods is missing, 1976! I would happily pay costs to get my holes filled, or if anyone else happens to need some.... these cover fixes and modifications for many different Yaesu's, Mainly FT101x.

I Have

1972, 77, 80,81,82,83,84,85

I Need

1973,74,75,76,78,79, and 1985 #8,#9

Thanks, my apologies if anyone does consider this off-topic.

From boatanchors@theporch.com Wed Jan 8 18:47:36 1997
From: Tim Richardson <tim@america.net>
Subject: FS: Books
Message-ID: <2.2.32.19970108235217.006734b8@pop.america.net>

Here is a partial list of books that I currently have for sale. For the complete list you can request it from me via e-mail <tim@america.net>, or view it at my web site http://www.america.net/~tim/, or download the file booksale.txt via anonymous FTP at ftp://america.net/users/u2/tim/

ALTERNATING CURRENT CIRCUIT THEORY, Reed, 1948, hardcover, G, writing on first page, $10

ALTERNATING CURRENT CIRCUITS, Kerchner & Corcoran, 1947, hardcover, G, with answer key, $12

APPLIED ELECTRONICS, Massachusetts Institute of Technology, 1949, hardcover, G, name on first page, $15

ELECTRONIC CIRCUITS AND TUBES, Cruft Electronics Staff, 1947, hardcover, VG, $20

ELECTRONIC TRANSFORMERS AND CIRCUITS, Lee, 1947, hardcover, VG, name on first page, $10

ELECTRONICS, Millman and Seely, 1941, hardcover, G, $15

ENGINEERING METALS AND THEIR ALLOYS, Samans, 1949, hardcover, VG, $10

EVERYBODY'S RADIO MANUAL, Popular Science Publishing, 1945, hardcover, VG, $15

HANDBOOK OF CHEMISTRY AND PHYSICS, Chemical Rubber Publishing, 1944, hardcover, G, name inside front cover, 2500 pg. reference book, $30

MODERN CHEMISTRY, Metcalfe, Williams & Castka, 1966, hardcover, VG, $10

RCA RECEIVING TUBE MANUAL, RCA, 1948, softcover, G, $15

RCA RECEIVING TUBE MANUAL, RCA, 1956, softcover, G, $10

RCA RECEIVING TUBE MANUAL, RCA, 1960, softcover, G, $10

REFERENCE DATA FOR RADIO ENGINEERS, Federal Radio and Telephone Co., 1954, hardcover, G, name on first page, $15

THEORY AND APPLICATION OF ELECTRON TUBES, Reich, 1944, hardcover, G, torn inside covers, a few frayed pages, writing on first page, (mimeographed final exam EE427 Industrial Electronics, Illinois Tech, 1950, included), $20

UNIVERSAL ELECTRIC MOTORS: THEIR GENERAL PROPERTIES, PERFORMANCE, AND DESIGN, Puchstein and Kimberly, 1930, softcover, G, 73 pages, $8

Rating System: E -Excellent Condition, almost like new, no wear or discoloration
VG-Very Good, very slight wear, minor discoloration
G -Good, normal wear and discoloration
F -Fair, normal wear and discoloration, minor tears, fraying

To order send e-mail to tim@america.net specifying which book(s) you want to purchase, along with your name, address and zip code. I will notify you via e-mail if the book is still available and give the address where to mail your payment. Books will be mailed upon receipt of payment. All sales are first come, first served. Shipping EXTRA.

Please e-mail if you need further details about any book or wish to make an offer.

Tim Richardson WB4HZT Acworth, GA <tim@america.net> http://www.america.net/~tim/
"Those who cannot remember the past are condemned to relive it."-Santayana

From boatanchors@theporch.com Wed Jan 8 12:04:14 1997

From: k7yha@juno.com (Richard H. Arland)
Subject: FS: EF Johnson Courier Linear
Message-ID: <19970108.115834.6727.1.k7yha@juno.com>

Gang:

I have a Johnson Courier 500 watt linear amp for sale.

Cosmetic condition about a 7: Case is scratched but will look good with a sanding and respray. Some scratches on the top left edge of the front panel (not near any lettering). All knobs are original.

Electrical condition: unknown. Needs power cord (I have the dual fuse plug that originally went on the line cord). Also needs HV PLate on/off switch (toggle is missing). Both 811As along with both 866As are intact. Chassis is clean. Original electrolytics still in place on underside of chassis.

Terms: I'll accept bids from today until 2359 hrs EST Saturday (1-11-97). Highest bid above $300 PLUS SHIPPING takes it. REMEMBER: this beastie weighs about 75-80 pounds. I live in Wilkes-Barre, PA (near Scranton) and prefer pickup, BUT I will drive a 100 mile radius to deliver.

73 es tnx

rich K7SZ (717) 825-5395 (anytime/machine on 24/7)

From boatanchors@theporch.com Wed Jan 8 12:04:14 1997
From: pmills@A.crl.com (Phil Mills)
Subject: FS: KWM-2A
Message-ID: <199701081440.AA20937@A.crl.com>

Collins KWM-2A with PM-2 power supply, overall good condition, front panel very good. $550 including shipping in US.

thanks & 73,
Phil
.
Phil Mills, AB5TH   ****   *****
pmills@a.crl.com
281-992-5762 DAYS
Friendswood, TX   (south of Houston)

From boatanchors@theporch.com Wed Jan 8 18:47:36 1997
From: "Paul Bock" <pauboc@smtplink.pulse.com>

Subject: Funky Props
Message-ID: <9700088527.AA852768852@smtplink.pulse.com>

Thanks to Ray, W2EC, for verifying what I suspected last night. As I tuned the R-4A up from 9.5 to 10.0 MHz, it just suddenly went deadsville somewhere between 9.8 and 9.9. But the cutoff seemed so definite that I thought something had died in the RX (like maybe the preselector).

Reminds me of the time that we experienced a SID at sea and wasted time 'shooting an R-390A until we realized that *ALL* of them were dead. We ended up having to copy *VLF* just to get the Fleet Broadcast.....

Paul, K4MSG

From boatanchors@theporch.com Wed Jan 8 01:42:50 1997
From: Stephan Sykes <ssykes@emirates.net.ae>
Subject: Fuses
Message-ID: <01BBFD30.3268B100@cse115.emirates.net.ae>

Instead of modifying the radio or cord for a fuse, I have just built an extension cord with an outlet box. Put the fuse and/or switch in it.

Steve Sykes
KD2OM

From boatanchors@theporch.com Wed Jan 8 12:04:14 1997
From: DCPIN@aol.com
Subject: Fwd: Stancor SA-403-A Clipper-Filter
Message-ID: <970107233653_814264035@emout17.mail.aol.com>

OK Gary you have it. I'll box it and mail it tomorrow.

Good luck and much fun........Chris KO4QW

Forwarded message:
From: wb8bem@hiwaay.net (Gary Taylor)
To: DCPIN@AOL.COM

From boatanchors@theporch.com Wed Jan 8 21:53:05 1997
From: Eugene Rippen <soundval@foothill.net>
Subject: Gen. Radio. 1900A Wave Analyzer
Message-ID: <32D4615A.1B3A@foothill.net>

I have a General Radio Model 1900A Wave Analyzer. It is pretty clean looking excep that the 2 concentric tuning knobs are gone. NO WAY AM I GOING TO TEST THIS! Figure it is about 45 lbs shipping weight.

Does anyone want this? If so how much money are you willing to part with in order to be the only person on the block with one of these?

Best deal is if someone picks it up. I want at least $15 for packing it. Otherwise my best deal would be to tear it apart for parts.

Eugene Rippen, 105 Donnington, Auburn, CA 95603

From boatanchors@theporch.com Wed Jan 8 12:04:14 1997
From: Eugene Rippen <soundval@foothill.net>
Subject: GOOD R390A FS
Message-ID: <32D3C3FD.613@foothill.net>

For sale:

Clean, Working, Complete, Original R390A, $325 plus packing and shipping.

Send address ZIP, for shipping charges

Eugene Rippen, 105 Donnington, Auburn, CA 95603

From boatanchors@theporch.com Wed Jan 8 12:04:14 1997
From: Cormac Thompson <cormac@televar.com>
Subject: GSB-100 Case Wanted
Message-ID: <32D3A60F.6F8@televar.com>

Hello there:

I am looking for an original case for a Gonset GSB-100 transmitter. Last owner had it rack mounted. Conidition not terribly important.

Thanks & 73.
Cormac, W7JHS, Prosser, WA
cormac@televar.com

From boatanchors@theporch.com Wed Jan 8 18:47:36 1997
From: BEN NOCK <106312.1035@compuserve.com>
Subject: Hand Generator problems
Message-ID: <199701081348_MC1-E62-43C4@compuserve.com>

Hi all. I picked up a hand cranked charger, used with
the 62 set but it simply supplies 12 volt to charge
batteries, so could be used with anything.

Problem is, when rotated, there is no output. I have taken
the generator out of the case, and rotated it with the
electric drill whilst holding it in the vice, but still no
output, or in fact, only a very small amount, 3 volt
or so. Nothing like 12 volt. So, whats wrong with it ?
There seems to be little that can go wrong so I'm
lost as to what to do.

Any ideas or suggestions.

Cheers, Ben G4BXD

From boatanchors@theporch.com Wed Jan 8 18:47:36 1997
From: Emile_Imberman@3mail.3com.com
Subject: Heath Manuals
Message-ID: <88256419.0078AAA0.00@hqoutbound.ops.3com.com>

Hi,
I have become the recipient of a Heath AT1 XMTR and VF1 VFO and as usual, no documentation. Once I get the 20 years of Storage shed dirt off, I will need to check it out. Can anyone supply me with copies of the complete manuals for these two goodies. I will gladly pay for copy and postage cost. Also, would like to correspond with someone who has some experience with this equipment. Thanks in advance for any help...
Emile_Imberman@3mail.3com.com

From boatanchors@theporch.com Wed Jan 8 01:42:50 1997
From: JKenny809@aol.com
Subject: Help with radio identification
Message-ID: <970107182226_911376876@emout18.mail.aol.com>

I found an old transmitter that looks in fair shape but obviously needs work.
 I do not know how old it is. It is a military transmitter (USN) built by RCA. The designation is CRV 52328. It also has another name plate that states Model TDQ. Does anyone know what this is and how old it might be. It

will be a challenging project.

```
From boatanchors@theporch.com  Wed Jan  8 01:42:50 1997
From: jproc@bellglobal.com
Subject: RE: Help with radio identification
Message-ID: <Chameleon.4.01.2.970107225127.jproc@jproc.bellglobal.com>
```

>It also has another name plate that
>states Model TDQ. Does anyone know what this is and how old it might be.

Here I thought the last TDQ in North America was aboard Haida and now I see it has a mate:-)

```
Power             : 45 watts continuous
Modes             : A2/A3
Frequency range   : 115 to 156 Mhz
Frequency control : 4 crystal controlled channels
Year              : 1943
```

Regards,

```
-------------------------------------
Jerry Proc VE3FAB
E-mail: jproc@bellglobal.com
Radio Restoration Volunteer
HMCS Haida Naval Museum
Toronto, Ontario
-------------------------------------
```

```
From boatanchors@theporch.com  Wed Jan  8 01:42:50 1997
From: Tom Clarke <fclarke@erols.com>
Subject: Re: Help with radio identification
Message-ID: <32D34AF8.3545@erols.com>
```

JKenny809@aol.com wrote:

> The designation is CRV 52328. It also has another name plate that states Model TDQ. Does anyone know what this is and how old it might be. It will be a challenging project.

We had one of these in our ham club years ago. I seem to remember it as a VHF (100-156) transmitter. The weight to power output ratio was considerable! Impressive thought it was!

73 de Tom W4OKW

fclarke@erols.com

From boatanchors@theporch.com Wed Jan 8 18:47:36 1997
From: "Jim Zellmer" <zellmer@raccoon.com>
Subject: HQ 180 Dial Alignment
Message-ID: <199701081806.MAA02647@slip1.raccoon.com>

I am in the process of putting a HQ-180C back together after cleaning the chassis up
and waxing the front panel. I had to pull the dials off to wash off all the accumulated
nicotene and dust. In the process of aligning the dials, after intialling setting each dia
vertical mark with the tuning capacitors closed, the manuals goes through another step
that is confusing me. The manual says,

"After the warm-up period, tune in to 4 MCS on ther Main Tuning Dial and 100 on
the logging scale on the Band Spread Dial, and turn on the crystal calibator..."

The manual mentions that the tuning capacitor plates should be closed for the low end
of the band. So I assume the radio should be on the 4-7.85 MCS band. Am I correct then
in my assumption that the initial dial alignment that the tuning capacitor is nearly closed and
the band spread capacitor is nearly open during this step?

73   ES GOD BLESS U ES URS

JIM ZELLMER, KA0VSL

From boatanchors@theporch.com Wed Jan 8 21:53:05 1997
From: Jim Garland W8ZR <4CX250B@miavx1.acs.muohio.edu>
Subject: HQ-180A problem -- solved!
Message-ID: <v03007805aef9f731d107@[134.53.65.12]>

Hi Gang,

Here's a report on an interesting problem with my HQ-180A, which may be
useful for owners of this receiver to file away .

The Problem: The receiver audio sounded slightly distorted at all volume settings, and there was signifant audio (equivalent to the AF gain turned up a quarter of the way) on strong signals, even when the AF gain control was turned all the way down. Oddly, the unwanted audio was AM, even if the receiver was in the SSB or CW mode. As the AF gain control was turned up, the residual AM audio was masked by the louder (desired) audio. In other words, at low volume settings an SSB, signal sounded like it was being received in the AM mode, and as the AF gain was increased , the signal gradually began to sound like properly detected single-sideband All tubes checked fine, the audio gain pot was also fine, all voltages and resistances were normal, the AGC circuit was also normal, as was the product detector, and all IF stages. There were no loose grounds, coax shields, etc.

The Explanation: I finally traced the problem to an open 20uF capacitor, C140, which bypasses the cathode of V16, the first audio amplifier and delayed AVC tube. V16 is a 6AV6, which contains a triode and two diodes, all sharing a common cathode. The triode portion of V16 is an audio preamplifier that drives the 6AQ5 AF output stage. The twin diodes have their anodes tied together and are used to detect the 60kHz IF signal. The detected voltage is filtered and the resulting d.c voltage is used as an AVC voltage for the RF amplifier. (A completely separate detector is used to generate AVC voltage for the IF amps and mixer.) Hammarlund calls this circuit a "delayed" AVC circuit, because no AVC voltage is generated until the 60kHz IF signal exceeds about 12V. Thus the RF amplifier runs at full gain for signals too small to generate this AVC voltage, while the IF and mixer stages are controlled at lower signal levels by a separate AVC circuit.

The 12V threshold for the delayed AVC diodes is a natural consequence of the fact that their cathodes are shared by the triode preamplifer. The triode is biased so that its cathode sits 12V above ground, thus providing a convenient reference point for the diodes. C140, the 20uF capacitor bypasses the cathode resistor, thus clamping the cathodes at AC ground. Unfortunately, when the capacitor opened up, the cathode was modulated by the diodes at an audio rate, and because the cathode was shared by the preamplifier, this modulated voltage varied the grid-cathode voltage of the triode, thus producing an AM signal that was coupled into the audio output stage. The audio was present even at minimum AF gain settings, because it came directly from the 60kHz IF stage, which was ahead of the AF gain pot.

It took a couple of hours to figure out this problem, and the experience reinforced my firm belief that the best way to understand a circuit is to fix it when its broken!

73,

Jim W8ZR

From boatanchors@theporch.com Wed Jan 8 21:53:05 1997
From: Eugene Rippen <soundval@foothill.net>
Subject: HW101/HP23 FS
Message-ID: <32D46499.2608@foothill.net>

For Heathkit HW101 with HP23 PS.

Works, Clean. Original. $140 plus shipping.

Eugene Rippen, 105 Donnington, Auburn, CA 95603

From boatanchors@theporch.com Wed Jan 8 01:42:50 1997
From: joelutz@juno.com (Joseph W Lutz)
Subject: Re: Jane's
Message-ID: <19970108.031502.2878.1.JOELUTZ@juno.com>

Gene,

Well I have a extremely good Jane's Military Communications 1986, Hard Bound, and I cannot see where this would have ever sold for 95.00. By the contents of this manual, I can see where it would run more that 100.00. (Anyone into communications equipment should have at least one late date copy of this). If there is any specific type/mfg you are looking for, pse let me know and I will look for it in my copy. Take care.
73 de JOE
- - - - - - - - - - - - - - - - -W7LPF/4 (NNN0KUU)- - - - - - - - - - - -
- - -
QWCA - NCVA - SOWP - FISTS
Gordonsville, Va 22942 (Orange County)
WTB: EFJ Adventurer, Hallicrafter HT32
- -
- - - - - - - - - - - -

From boatanchors@theporch.com Wed Jan 8 12:04:14 1997
From: "Mark J. Blair" <mblair@gruumsh.irv.ca.us>
Subject: Re: Jane's
Message-ID: <199701080615.WAA02240@gruumsh.irv.ca.us>

GFINER@nms.com wrote:
> As per my previous post, I took a drive to my local Barnes & Noble
> to look for a copy of Janes Military Communications book. [...] Well
> they had it listed (but not in stock) and my jaw dropped when she

> told me the price $255.00

I had the same experience at B&N. I finally found a copy of the 1987 edition at a used bookstore for about $75, after months of searching. Unfortunately, the oldest US radios listed in it (VRC-12 series, and so forth) are a generation newer than my green radios. But I still had to get it!

--
Mark J. Blair KE6MYK
e-mail: mblair@gruumsh.irv.ca.us

From boatanchors@theporch.com Wed Jan 8 12:04:14 1997
From: Tom Norris <badger@telalink.net>
Subject: Re: Jane's
Message-ID: <3.0.32.19970108071645.00708220@telalink.net>

>I had the same experience at B&N. I finally found a copy of the 1987

>edition at a used bookstore for about $75, after months of searching.

>Unfortunately, the oldest US radios listed in it (VRC-12 series, and

>so forth) are a generation newer than my green radios. But I still had

>to get it!

Even with its dearth of BA gear, a newer Janes is still a good reference.

The older editions are out there -- but I havent found any yet.

Another good source of BA info would be an older copy of

FM 24-24 :"<fontfamily><param>Courier New</param>RADIO AND RADAR REFRENENCE DATA"

Supposedly can be found by digging.

It contains info on gear from about 1965 or a bit earlier through the 70's. There is some tube

stuff in there (quite a bit, I have been told)

Fair Radio used to have a book called "Reference data For Field Radio Comm. Equipment" put out by

the Fort Gordon Signal School in 1964. Got one a couple years ago when
they still had them listed,

and it has been a big help with this Mil List

Project.

Any other good military BA references guys?

</fontfamily>

Visit my web site with info on military communications gear:

HTTP://telalink.net/~badger/millist/index.html

Am in the middle of reorginazing this page, so if you see any

glaring (or not) errors, lemme know!

****

Tom Norris KA4RKT

badger@telalink.net   Nashville, Tennessee, USA

thermionic@techie.com

****

From boatanchors@theporch.com Wed Jan 8 12:04:14 1997
From: Cosmo224@aol.com
Subject: Jane's Mil Comm
Message-ID: <970107220543_1957544723@emout11.mail.aol.com>

Howdy All

Although I have not seen the Mil Comm book at B&N, I was able to pick up the 93 edition, the Radar and Electronic Warfare edition, and C3I edition at Half Price Books in Austin, Tx. The lowest price was $40 for the Milcomm and the highest was $80 for the EW book. So, whats the bottom line? Try some of the used professional book stores. There are several such stores I know of in the Chicago area - I have seen some publications that I doubt I would ever find at a retailer.

All in all, very interesting - kind of like the Sears Wish Book for big kids!

73 de AA9IL
Mike Kana

From boatanchors@theporch.com Wed Jan 8 18:47:36 1997
From: Glenn Finerman <GFINER@nms.com>
Subject: Janes
Message-ID: <s2d3aa59.020@nms.com>

I stopped looking for the Jane's book because IT DOES NOT CONTAIN ANY BOATANCHORS.....just more recent equipment (sand state)
....not interested in that new fangled stuff!!

Tom Byran suggeted a military publication that Fair sells copies of which is an older comms gear catalog with photo's and descriptions of equip. Published in the 1950's...

re> I finally found a copy of the 1987
>edition at a used bookstore for about $75, after months of searching.
>Unfortunately, the oldest US radios listed in it (VRC-12 series, and
>so forth) are a generation newer than my green radios.

73...........Glenn Finerman N2BJG   gfiner@nms.com

WANTED = Collins S-Line Transmitters / Receivers
Collins KWS-1, 51J-4, R-648/ARR-41
Browning Golden Eagle Mk II and MK III

From boatanchors@theporch.com Wed Jan 8 18:47:36 1997
From: Thomas Bryan <tbryan@mailstorm.dot.gov>
Subject: Janes (fwd)
Message-ID: <199701082030.PAA09561@mailstorm.dot.gov>

> Tom Byran suggeted a military publication that Fair sells copies of which
> is an older comms gear catalog with photo's and descriptions of equip.
> Published in the 1950's...

That is the TM 11-487A. Anyone know what the quality of the Fair Radio copy is?

Tom Bryan
tbryan@mailstorm.dot.gov
Opinions expressed are my own.

From boatanchors@theporch.com Wed Jan 8 01:42:50 1997
From: Jacqueline Herman <jherman@sierra.net>
Subject: Last Spark on 500kc: 1965
Message-ID: <Pine.SUN.3.91.970107160819.10120C-100000@diamond.sierra.net>

The 1959 International Radio Conference finally set a date as to when all emergency spark transmissions would be prohibited on 500kc - that date was 1965. Now you might think that in an emergency, *any* mode should be allowed, but I suspect the reason this is not the case in this setting is that a modulated CW signal is necessary to activate an Auto Alarm receiver; a ship sending a distress message with a (standby) spark xmtr might not get the needed aid due to the twelve four-second dashes not activating AA rcvrs onboard nearby ships.

Now you know the rest of the story!

(Source: CONTACT AT SEA, by Peter Schroeder)

Jeff KH2PZ / 7

From boatanchors@theporch.com Wed Jan 8 21:53:05 1997
From: Bob Duckworth <WB4MNF@atl.org>
Subject: Looking for a carbon microphone
Message-ID: <01BBFDA6.E24064D0@office>

99% of my ham radio operations have been CW and I'd like to do a bit of AM. Toward that end, I am looking for a carbon microphone to modulate cathode current. A T-17-B or similar would be great.

Anybody got one in the junkbox?

I'll trade a tube or CW xtal or ???

These old carbon mics aren't rare collectibles are they?

I have a suggestion for swapping on BA. I like the
'Rules of Ware' approach. I also like hamfests with
selection of stuff all presented at once. Combining the
two and having a monthly swap on the list could be a lot of fun.

Once a month everyone could list their junk (errr treasures)
say on the first weekend and hold off making a decision to
sell, swap, or keep until the
second weekend to give those on digest or with slow email
a shot. It would be really neat to open up the mail once a month
and see a pile of goodies up for swap. Junk box stuff welcome.

-bob

wb4mnf

From boatanchors@theporch.com Wed Jan 8 21:53:05 1997
From: "Gary H. Harmon, Jr." <gharmon@txdirect.net>
Subject: Misc For Sale
Message-ID: <199701090312.VAA17947@legend.txdirect.net>

Don't email me, email the seller......

The following items are available from Rick Yerke in Moscow, PA. His email address is yerke@csrlink.net. Prices are his and DO NOT include shipping.

SX-25 receiver $75

DX-60 and VFO $100

RME45 and speaker $100

Clegg 2m FM & power supply $100

HQ-110 with clock & speaker $110

TR-3 & power supply $210

Remember......email Rick, not me!!!!!!

BTW, he is looking for a nice crystal radio from the 1920s, advertising signs and will trade for them.

73,
gary

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<><><><><><><><><><><><><><><><><><><><>
<> TOO MANY PROJECTS, NOT ENOUGH TIME <>
<>                                    <>
<>    Gary H. Harmon, Jr., K5JWK      <>
<>        6302 Robin Forest           <>
<>    San Antonio, TX 78239-3218      <>
<>          (210) 657-1549            <>
<>       gharmon@txdirect.net         <>
<>                                    <>
<>PACK & SHIP UNTO OTHERS AS YOU WOULD<>
<>   HAVE THEM PACK & SHIP UNTO YOU   <>
<><><><><><><><><><><><><><><><><><><><>
```

From boatanchors@theporch.com Wed Jan 8 01:42:50 1997
From: "Bob Ragain, 303-470-2534, RAGAIN@SEDALIA.OMNES.SLB.COM"
<RAGAIN@hubvx6.sedalia.wireline.slb.com>
Subject: Missed bargains
Message-ID: <970107161738.2507e1db@hubvx6.sedalia.wireline.slb.com>

Hello Ben and BA'ers,

Ben said "What hope is there for anyone not glued to the screen, with nothing else to do all day apparently, to ever get a look in."

Yep, it do make ya cry. Sad thing is, many of us are on "digest" distribution and that guarantees that we seldom get a chance at the sweetest offers.

Another sad thing is that many times a rebuilder will be nurturing a favorite BA just waiting for a specific part. That part is offered and gone to someone who doesn't even need it, but bought it just because the price was right. There was no chance to negotiate. Bet all of us have seen such items and would have been happy, even overjoyed, to have paid twice the price. But that's life. On the other hand, finding that special do-whatchet at a wonderful price, and being the first one there is part of the magic of this game, too. Sadly, many of us must realize we will never get that chance via email.

IMHO, if every sale were allowed to escalate to highest bidder the transactions would be long and tedious and the cost of our hobby would go up drastically. I really appreciate other BA'ers making what they know is a bargain offer to the rest of us! We all come out ahead in the long run.

Maybe the best compromise would be to contact the winners in these situations to see if they would want to make a quick, but reasonable, profit?

Happy BA'ing,

Bob

From boatanchors@theporch.com Wed Jan 8 18:47:36 1997
From: Richard Hager <rhager@millcomm.com>
Subject: Re: Missed bargains
Message-ID: <32D414CB.6014@millcomm.com>

Bob Ragain, 303-470-2534, RAGAIN@SEDALIA.OMNES.SLB.COM wrote:

>
> Hello Ben and BA'ers,
>
> Ben said "What hope is there for anyone not glued to the screen, with nothing else to do all day apparently, to ever get a look in."

> Maybe the best compromise would be to contact the winners in these situations to see if they would want to make a quick, but reasonable, profit?
> Bob--

Great idea. Now if the guy who just bought the Thermocouple and Meter for $10 would please contact me, I'd be glad to give you a 50% profit ($15 for the $10 item). Of course, I'll have to cover the freight you paid too, so this isn't real efficient. But I still think Bob has a good idea.

Another idea would be for us to set up a web page where we can all list things that we don't really need. In cases where we've bought something not really needed, we could then repost it on this web page, maybe even saying something like "paid $10 plus $4 freight, make offer higher than that...".

For a while now, I've been thinking of doing something similar for test equipment. I wish I knew more about setting up web pages...

Richard
--

Richard Hager

+ Ah-ha! Design Group, Inc.   -
+ Precision CNC Technology, since 1991 -
+ 612-641-1797, Fax: 612-641-8681   -
+ "I just like to make things" So...   -
+ ...please call Ah-ha! directly for CNC info   -
+ http://www.millcomm.com/~ahha email: ahha@millcomm.com -

From boatanchors@theporch.com Wed Jan 8 18:47:36 1997

From: bdhall@ghg.net (Benjamin D. Hall)
Subject: Re: Missed bargains
Message-ID: <32D42E59.441F@GHG.net>

Recently, while on the subject of missing bargains due to being in the digest mode, the following was written...

> > Ben said "What hope is there for anyone not glued to
> > the screen, with nothing
> > else to do all day apparently, to ever get a look in."

The above, slow unfair e-mail, digest mode, and other reasons that may lead to the slowness of a response is why I wholeheartedly endorse the now-famous "Rules or Ware." Simply put, you offer something for sale, give people a period of time to reply, say 10 days, and sell it to the person that needs the part for a homebrew project, always wanted one becuase his kid brother used it to contact space aliens, had one stop a bullet when you were in the service, or to the one who tells the best joke about diet Pepsi drinking New Jersey lawyers that like grape jam. Basically you sell it to the person that will give you the best warm feeling.

Works well for me! Thanks to Larry Ware for coming up with such a fun system. After all, I'm into BA's cause I like to have fun with them. The day I stop having fun with them is the day I get rid of them... (Of course, it will probably never happen)

73,
Ben
--

```
----------------------------------------------------------------------
 From the computer of            | Collector of fine firebottle
 Benjamin D. Hall, Houston Texas | equipment, as well as other things
 BDHall@GHG.net (home) -or-      | involving Earth, Air, Water, and
 Benjamin.D.Hall1@JSC.NASA.gov   | Fire.
---------------------------------------------------------------------
```

PLEASE NOTE MY NEW HOME E-MAIL ADDRESS above. My old address, BDHALL@GHGCorp.com, will still work for a period of time however.

From boatanchors@theporch.com Wed Jan 8 21:53:05 1997
From: jproc@bellglobal.com
Subject: Re: Missed bargains
Message-ID: <Chameleon.4.01.2.970108203403.jproc@>

```
>
>Another idea would be for us to set up a web page where we can all list
>things that we don't really need.

Richard,

We had something similar to that right here on Boatanchors. There was a
WANTED equipment list and a FOR SALE LIST maintained in the form of E-mail
files in the archives. The system gradually fell apart for many reasons.( ie
BA newbies not knowing about it; people not advising the list maintainer of
sold items; list maintainer changeovers; lack of general interest etc). The
Web page concept is just a variation on the theme and I would rather doubt
if that solution would succeed any better than the E-mail method. The big
question is: Who will volunteer to offer the Web page space and who will
maintain the information ?

The idea of a 'window of reply' sounds like a very practical idea to me if
the seller has the time and patience to collect the replies and award them
to the most needy individual. This gives the greatest number of people a
chance to bid on an item they really want without having to be logged into
the Internet 24 hours per day. To sellers who want an instantaneous sale,
the concept simply won't work. This type of seller may have some
legitimate reasons for choosing the 'fast' method. Such is life.

Regards,
-------------------------------------
Jerry Proc VE3FAB
E-mail: jproc@bellglobal.com
Toronto, Ontario
-------------------------------------
"May all your hangups be of the drip-dry variety".



From boatanchors@theporch.com  Wed Jan  8 18:47:36 1997
From: "Allan Fritsche" <fritsche@msn.com>
Subject: Monthly Plea for a SX-101 BFO Knob
Message-ID: <UPMAIL03.199701082102160229@msn.com>

Hi Gang, only do this once a month... Need a BFO KaNob for the SX-101 or
SX-101A model.
Will give 25 bucks for the animal or trade what I have left of the Hammer
knobs.
Please reply only to me
Thanks
Al
fritsche@msn.com
```

From boatanchors@theporch.com Wed Jan 8 18:47:36 1997
From: Cal Eustaquio N6KYR <ceustaqu@dot.w6bhz.calpoly.edu>
Subject: National B coil price lowered
Message-ID: <Pine.SUN.3.91.970108161824.9482A-100000@dot.w6bhz.calpoly.edu>

Now asking $40 shipped. In good condition. Covers 7 and 14 mhz in HRO-50.
Cal.

From boatanchors@theporch.com Wed Jan 8 12:04:14 1997
From: Tim Richardson <tim@america.net>
Subject: NC109 & more
Message-ID: <2.2.32.19970108061233.0087c2a8@pop.america.net>

Tonight a National NC109 followed me home. The receiver is in excellent condition (9+) except for the small knobs. The main and bandspread knobs are fine, but some type of white substance is on the small knobs. By the way, the set is packed in its original box with manual. Peeking inside the cabinet, the copper plated chassis and interior look perfect. The set looks like it was probably little or never used. (The box has the name of Olson Electronics in Chicago on the box). It has been in storage for years, so I'll wait until I have some time to reform the electrolytics then check it out.

Also in the deal I picked up the following:
1-Heathkit V-6 VTVM (VG)
1-Heathkit SG-8 RF Signal Generator (VG+)
1-Heathkit AO-1 Audio Oscillator (G)
1-Heathkit HV Probe (E)
1-Heathkit RF Probe (E)
14-assorted meters-most NOS
3-Olson SW157 resistor substitution boxes (E)
2-Olson SW142 capacitor substitution boxes (E)
1-24 drawer parts cabinet full of misc. parts
1-Variac
70-(approx) books--radio, electronics, and engineering books

Most of the books will be going up for sale after I have a chance to catalog them. A list will be made available first to members of the Boatanchors list. Altogether a good evening for me.

Has anyone used the NC109? I would be interested in hearing your experiences with the rig.

Tim Richardson WB4HZT Acworth, GA <tim@america.net> http://www.america.net/~tim/
"Those who cannot remember the past are condemned to relive it."-Santayana

From boatanchors@theporch.com Wed Jan 8 21:53:05 1997
From: "Gary H. Harmon, Jr." <gharmon@txdirect.net>
Subject: Need Heathkit Filters
Message-ID: <199701090201.UAA09763@legend.txdirect.net>

Hello fellow BA fellows. I am looking for a couple of Heathkit filters, probably like the kind that were in a HW-100/101/SB-100/101/102/SB-301/etc. Need the 2.1 kHz SSB filter and the 400 or 500 Hz CW filter. These are needed to populate a SB-313 SWL receiver. There may be other filters of similar size that will work. What about the ones recently discussed for the 75A4 receiver? Any recommendations/suggestions gratefully accepted.

If you can help, please let me know. Cash or possible trades for some extra stuff I have.

73,
gary

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<> TOO MANY PROJECTS, NOT ENOUGH TIME <>
<>                                    <>
<>    Gary H. Harmon, Jr., K5JWK      <>
<>        6302 Robin Forest           <>
<>    San Antonio, TX 78239-3218      <>
<>          (210) 657-1549            <>
<>       gharmon@txdirect.net         <>
<>                                    <>
<>PACK & SHIP UNTO OTHERS AS YOU WOULD<>
<>   HAVE THEM PACK & SHIP UNTO YOU   <>
<><><><><><><><><><><><><><><><><><><><>
```

From boatanchors@theporch.com Wed Jan 8 12:04:14 1997
From: Rodger Singley <rbsingl@rs6000.cmp.ilstu.edu>
Subject: need manual for Viking 2
Message-ID: <9701081625.AA30728@rs6000.cmp.ilstu.edu>

Hi gang,

Just received a Viking 2 and VFO via UPS (which they attempted to destroy, outer box was leaking packing but net result was just one dead rectifier) and I need a copy of the manual for the xmtr-I have a copy for the VFO. Will be happy to reimburse copying/mailing expenses.

Thanks,

Rodger WQ9E

From boatanchors@theporch.com Wed Jan 8 01:42:50 1997
From: "Grant Youngman" <nq5t@gte.net>
Subject: Need R390A Maintenance TM
Message-ID: <199701080405.WAA20470@smtp.gte.net>

Gang ..

Anyone out there have the depot maintenance manual for the 390A?

I followed up with NTIS on my three month old order, and they are out of stock -- still-- with NO estimated availability from the manual source.

Grant/NQ5T

Grant Youngman / NQ5T

nq5t@gte.net
http://home1.gte.net/nq5t/index.htm
Double Oak, TX -- nr Dallas

From boatanchors@theporch.com Wed Jan 8 01:42:50 1997
From: launerb@crl.com (William H. Launer)
Subject: Re: Of fused plugs +c
Message-ID: <v0153050eaef8b0df9f3a@[192.0.2.1]>

There was mentioned recently of a case where the 15 Amp line fuses blew before 8 Amp (?) slo-blow fuses in the equipment blew. I looked at some representative fuse characteristics in an Aircraft Design Handbook, and it's not surprising. A normal fuse will conduct about 4 times rated current for 0.1 seconds, while a slo-blow fuse will conduct 17 times rated current for the same time interval. Going down the curves, the normal fuse will conduct 1.5 times rated current for 10 seconds, while the slo-blow fuse will withstand 2.8 times rated current for 10 seconds. Both will conduct 1.3 times rated current for 1000 seconds. When you pick fuses to protect equipment, make them just big enough to prevent "nuisance outages" during start up.

I agree with those who recommend putting the fuses inside (at the risk of being labeled a heretic!) the equipment, especially when you replace the old line cord with a modern 3-wire cord. There is no reason to be such sticklers for "historical accuracy" that we jeopardize our lives and homes. Museum pieces which are mostly on display, and not operated are different, but most of us want to use our "boatanchors" while they're in our possession. A little modern safety protection may allow us to be here longer to enjoy them! Fused external outlet boxes will likely be "borrowed" for another project, and the unprotected "ba" will be plugged into the wall the next time operation is desired. The equipment designers complied with the safety standards of their day, just as modern designers comply with current standards.

I don't know if this is worth $0.02, but it's what I believe.

73, Bill wb0cld

Bill Launer
St. Charles, MO
launerb@crl.com
wb0cld@wb0cld.ampr.org [44.46.66.25]
qrp-l #279   qrp arci #3551
Grid Square EM48RT

From boatanchors@theporch.com Wed Jan 8 12:04:14 1997
From: Mike Warren <71555.713@compuserve.com>
Subject: Old Ham magazines available
Message-ID: <199701080608_MC1-E67-10D8@compuserve.com>

Greetings All,

I met a nice older gentleman who asked me to post this information.

Mr. Carl Hvambsal wants to dispose of his collection of Ham magazines and has placed an ad in A.R.C. but has not received much response.

Since he was local, I went by his place yesterday to see what he had. He has "QST" dating back to 1934 (except 1945 and 1956, which I picked out); "CQ" from the beginning (not sure when that was and I took 1957); and "73" from 1966 on (I took 1965). All that I saw are in fair-to-good (not 'excellent') condition.

He did not have any set prices and seemed very happy with the $6.00/yr that I offered him for the years I picked out. (I'm not a magazine collector and have no idea what these older mags are worth, but had seen them for

$.50 a piece at Hamfests, so thats what I offered him.)

Anyway, he is open to any and all offers for single issues, single/multiple years or the entire lot, but wants to do business via mail. He specifically asked that I not post his telephone number because "I keep odd hours".

Name: Carl Hvambsal
Address: 5447 Chicago Ave., Minneapolis, MN 55417

Hope this helps someone -- 73, Mike

From boatanchors@theporch.com Wed Jan 8 21:53:05 1997
From: Bill Coleman WF2A <wf2awdc@ibm.net>
Subject: Paint Job Worries
Message-ID: <BMSMTP8527872810wf2awdc@pop03.ny.us.ibm.net>

A week or so back I posted the trials, tribulations, and ultimately great results I had repainting the front panel of my SP-600.

Well, I tried the exact same steps using the exact same cans of primer and gray paint on a panel which will hold a couple of speakers. The results were horrible.

Both the panels are aluminum and except for 6 or 7 paint and strip cycles on the SP600 panel as I searched for the right techniques and paint combos, both panels got the same treatment (strip, wet sand, primer, wet sand, gray, wet sand, clear coat).

Yet the speaker panel consistently yielded an extreme case of krinkles on the first coat of gray. The 'cure' was to skip the primer.

Now I'm worried.... will my SP600 panel develop a case of the krinkles?? I suspect the answer may be that not all AL is created equal and the primer doesn't care for the 'mix' in the speaker panel. I think I'll stick to electronics - I don't know much, but I can usually repeat it!

What a great hobby... electronics, metal working, painting, chemistry, hole digging, tree climbing....

Bill Coleman (WF2A)

Email: wf2a@ibm.net

From boatanchors@theporch.com Wed Jan 8 18:47:36 1997
From: "Broline, Nick (Tracor MS Mail)" <ENB@eng1.tracor.com>

Subject: PMR-6A and PMR-7 Schematics Needed
Message-ID: <c=US%a=_%p=Tracor%l=TRACOR/AUSTIN/00020D44@ems1.tracor.com>

Thanks to all who helped me with my Cheyenne transmitter project.

I recently acquired the collection of Elmac gear owned by the silent key, N5GFX,, an ace CW and QRP operator. Charles had put a lot of blood, sweat, and tears into his effort to reconstruct the station which his father had assembled in Charles' high-school years: the AF-67 and PMR-6 pair, and an HQ-170. It is my intention to complete his efforts to complement my BA station.

The AF=67's and AC power supply, and the '170 are fully covered with multiple docs and working copies, but..........

His collection included a PMR-6A with absolutely no documentation. When he acquired it the case had been repainted a bright green and the top and bottom covers replaced with gold colored aluminum cane metal from the local HW store. It had no docs at all. I don't think that I'm sticking my neck out too far when I assume that the PMR-6 didn't come that way!!! I expect that it is working as is, as long as one keeps the lights dim or wears sunglasses.

He also had a PMR-7 and a book, but no schematic in the book!! It was also without case. It needs a bit of help, but is basically all there. It will restore beautifully.

I would like some help in finding a book on the PMR-6A and a schematic only for the PMR-7.

Although I feel that it is unlikely to find, top and bottom covers for the '6A and a case for the PMR-7 in any condition, it would keep me from having to cobble out some less than perfect renditions of same. At a minimum, I would appreciate a description of the covers and cases. Were they perforated, ventilated, or solid, aluminum or steel, and spotwelded or riveted?? Were the colors the same as seems to be on the intact part of the '7....a fairly dark gray?

If the original color of the PMR-6 was the green mine is painted, my sincere apologies to all for poking fun

As usual, cost and trouble compensated.

73
Nick Broline W5FUA

From boatanchors@theporch.com Wed Jan 8 01:42:50 1997

From: Larry Godek <AZCOT@gnn.com>
Subject: R-390 manual
Message-ID: <199701080124.UAA00663@mail-e2b.gnn.com>

I have an extra copy of TM 11-5820-357-35, Field and Depot Maintenance Manual for the R-390/URR.

Anyone interested at $25 and that covers shipping as well?
Dated 9 Mar 1962.

Excellent condx btw if that makes any diff.

Larry Godek W0OGH
AZCOT@gnn.com

Gilbert, AZ. 85233

Ex-W6KQL, W8BPV, DL5LS, K0TAO, KN6TUP

From boatanchors@theporch.com Wed Jan 8 21:53:05 1997
From: wb7vdn@ro.com (R. Lamb)
Subject: Re: R-390A meters (one more time)
Message-ID: <199701090105.TAA13839@sh1.ro.com>

>BAfolk -
>
> There has been some discussion here about replacement meters for the
>R-390A. The wisdom so far is that 'just any' meter with the correct
>full-scale current won't necessarily work - the new meter has to have the
>right internal resistance as well.
>
> ================================snip======================

Sorry for the long delay with this info. I waited until the sheet metal from my R-390A was doing the rounds in the dish washer.

I measured the full scale rating of the meters and the internal impedance of them.

Here is what I found:

```
                 LINE LEVEL METER           CARRIER LEVEL METER
                 ----------------           -------------------
```

Full scale	200 uA	1 mA
Impedance	11.9k ohms	20 ohms

This is the way I measured them. I set R1 to max and R2 to zero ohms.
Then, I adjusted R1 to give full scale reading and measured the current
(full scale).
Then I adjusted R2 for a half scale reading on the R-390A meter.
Ohms law says that the value of R2 is now equal to the internal resistance
of the R-390A meter. I then unhooked R2 and measured with my digital ohmmeter.

```
                R1                       R2
    + <------/\/\/\/\/--------------/\/\/\/\/\-------------[meter]---|
                                                                     |
                                                                     |
                                                                     |
    - <--------------------------------------------------------------|
```

I hope this helps those of you out there to find suitable replacements.

```
Ron Lamb           |    Timothy Twerp was most astounded.
WB7VDN             |    When what he thought was, wasn't grounded.
wb7vdn@ro.com      |    In fact, one could say he was most transfixed.
Huntsville, AL.    |    With his thumb on pin 3 of a live 6L6!
```

From boatanchors@theporch.com Wed Jan 8 01:42:50 1997
From: Dennis McLaughlin <dennism2@ix.netcom.com>
Subject: RE: R390A C609 Cap
Message-ID: <01BBFCC7.6CED40C0@akr-oh3-17.ix.netcom.com>

Ben

C609 is a 8uF 30 volt +50-15% tantalum slug wet anode 85∞C capacitor.
MIL-C-3965 spec CL44BH080TP3.
Sprague 132D805C5030U0.
ITT MA8MA.
Fansteel PP8B30A2.

I replaced the cap with a 10uF at 50 volt axial aluminum.

From: Benjamin D. Hall[SMTP:bdhall@ghg.net]
Sent: Monday, January 06, 1997 5:15 PM
Subject: R-390A question

Hey there R-390A fans, need a small peice of info...

C609 in the audio is an 8 uf polarized electrolytic cap according to my manual. But what is the voltage rating? Since it is a cathode resistor bypass on 5814A, I'm thinking 25 or 50 volts would be appropriate. For some odd reason my R-390A manual doesn't list resistor wattages or cap working voltages. Anyone know for sure?

Thanks and 73,
Ben

From boatanchors@theporch.com Wed Jan 8 21:53:05 1997
From: Dennis McLaughlin <dennism2@ix.netcom.com>
Subject: RE: R390A C609 Cap
Message-ID: <01BBFDAB.B284C060@akr-oh1-06.ix.netcom.com>

Ben

If C609 is leaking, is's sulfuric acid. You will need to neutralize the area with a baking soda and water solution. The C602 cap in my R390A is marked
ASTRON
TQFP-3-033-20
.033-300
1590

I don't know the spec's for the cap but I think it is a hermetically sealed paper dielectric. The liquid should be mineral oil. From the above number the -20 might mean 20%. Replacement with a polyester (mylar) or metalized polyester film 10% should work.
XICON 400v 10 % Mouser stock no. 146-400V.033K (radial case)
Can't find a 0.033uF @ 400V in a axial case.

Guess what I've got sitting right here on my desk to replace it with?
You guessed it, 10uF at 50 volt axial aluminum.

In the meantime, I've done some checking on the other caps in the deck, and several are leaky. The worse offender is a .033 ufd at 300 volts. Looking thru my parts box, I've got .022's and .047's at 630, but no

.033's. Do happen to know the tolerance specs on C602 like the above
cap? If similar to the tolerance on C609, I can easily get away with
the .047, but if the tolerance is tighter, I guess I'll be placing an
order with Mouser...

Thanks and 73,
Ben

```
--
----------------------------------------------------------------------
 From the computer of            | Collector of fine firebottle
 Benjamin D. Hall, Houston Texas | equipment, as well as other things
 BDHall@GHG.net (home) -or-      | involving Earth, Air, Water, and
 Benjamin.D.Hall1@JSC.NASA.gov   | Fire.
---------------------------------------------------------------------
***PLEASE NOTE MY NEW HOME E-MAIL ADDRESS above.***  My old address,
BDHALL@GHGCorp.com, will still work for a period of time however.
```

From boatanchors@theporch.com Wed Jan 8 01:42:50 1997
From: bowes@ibm.net
Subject: Radiotron 4th Edition FS
Message-ID: <9701080535.AA0059@slip166-72-135-214.mi.us.ibm.net>

I have a copy of the Radiotron Designers Handbook, 4th edition for sale. The pages of the book are all in very
good condition and are unmarked. The binding is somewhat frayed with a split on one edge. I am asking $65,
shipped CONUS.

Tom Bowes
KK8M

```
=============================
HEY! Anybody got a spare DM-28Q?! OK, I'll settle for a National
speaker to go with my HRO-50T1!
```

From boatanchors@theporch.com Wed Jan 8 18:47:36 1997
From: km1h@juno.com
Subject: Rcvr front end protection
Message-ID: <19970108.140956.9887.7.km1h@juno.com>

My server seems to have ate this msg which was sent a few days ago in
reply to Bobbi's posting. Here goes again.

Also I 100% agree with the recent comments that zeners are not a good choice.

Hi Bobbi, that was excellent info.
I would just wish to offer a few caveats on the use of diodes across the antenna terminals.

In strong signal environments the diodes can and do go non-linear and create all sorts of IMD products. The germanium (1N34, 60, 270, etc) are the worst and the generic silicon PN diode (1N914/4148, etc) are not much better. A better solution is to use Schottky diodes if one wishes to use the simplest method.

Front end protection of delicate and expensive VHF/UHF preamps has been an issue for years, and the debate continues as to the "best" protection; including biasing methods.

Modern SS xcvrs use some type of diode pair at the antenna terminal; I cannot find any references. In my TS-940 it is a DSA-441LA.

The biased Neon lamp as mentioned by Bobbi (NE-2, etc) has been a staple in gear for decades. A modern equivalent is the gas discharge devices found in pole mounted CATV equipment. They are often small wire lead devices roughly the size of a 2W carbon resistor. Scrapped CATV equipment is usually free for the asking, particularly in areas undergoing an upgrade or storm damaged repair.

A bonus of CATV scrounging is the excellent weather resistant housings. CATV coaxial fittings use the same threading as the UHF and N connector making them adaptable to any number of outdoor projects. I use many to house open frame relays to do various antenna phasing switching up on the towers.

I sor of got off the main subject here and started drifting out of the pure BA realm...sorry.

73 Carl KM1H

>
> Another handy trick with low-Z receiver inputs is to use a couple
>of
>back-to-back semiconductor diodes (we used to call 'em "crystal
>diodes")
>at the receiver input, which will clamp the P-P voltage there to
>whatever
>the forward drop of the diodes is. An older trick is to bias a neon

```
>lamp
>to do the same thing.
>   Bob Keys wrote awhile back of the "simplest TR switch," which uses
>a
>very small coupling condenser between receiver and antenna, and a
>back-to-back diode clamp on the receiver input.  It's not for the
>high-power set but it's fine for small fry.  (Limiting factor?
>Breakdown
>voltage of the diodes and one's faith in physics vs. the cussedness of
>the
>universe!)
>
>   73,
>   --Bobbi
>
--------- End forwarded message ----------
--------- End forwarded message ----------


From boatanchors@theporch.com  Wed Jan  8 21:53:05 1997
From: Richard Hager <rhager@millcomm.com>
Subject: Re: Rcvr front end protection
Message-ID: <32D43C21.2619@millcomm.com>

Carl (KM1H) mentioned scrounging gas-discharge transient supressors out
of old CATV equip, to use as rcvr front end protection.  A good idea.

I just wanted to mention that these devices are also available new from
Allied's catalog, if you're having trouble finding scrap to scrounge
from.  Seimens makes the ones in the Allied catalog.  I'm sure there are
other makers as well.

Richard
--

        Richard Hager

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+ http://www.millcomm.com/~ahha  email: ahha@millcomm.com -


From boatanchors@theporch.com  Wed Jan  8 18:47:36 1997
From: BEN NOCK <106312.1035@compuserve.com>
Subject: Re-painting Aluminium cases ???
```

Message-ID: <199701081348_MC1-E62-43C2@compuserve.com>

Can anyone suggest the best way of re-paint alum
chassis and front panels. As luck would have it, all
the control lettering is on removable labels, so they
can all be removed, the front panel sanded and really
cleaned off ready for its new coat. Whats the best primer
etc ?

Ben G4BXD.
MILITARY WIRELESS IN THE MIDLANDS

From boatanchors@theporch.com Wed Jan 8 18:47:36 1997
From: Richard Hager <rhager@millcomm.com>
Subject: Re: Receiver front-end protection
Message-ID: <32D40FB6.2B3@millcomm.com>

Jim Garland W8ZR wrote:
>
>
>Richard had written...
> >Hi Jim,
> >
> >I don't think you'd have good luck with the zeners. The capacitance of a
> >6v zener is very high, maybe several hundred pf, depending on the wattage
> >of the zener.
> >>Richard Hager
> >
>Richard,
> I don't think zener capacitance would be a problem, since (if I
> recall rightly) the capacitance is developed in the reverse-biased
> configuration (below the breakdown voltage.) In the forward-biased mode,
> the zener capacitance is very small, typically the same as an ordinary Si
> diode. Since in my scheme the diodes are series-connected, one in the
> forward and one in the reverse direction, the forward-biased diode will
> always limit the capacitance.
> Jim W8ZR--

Nope, don't think this is right. I still haven't had a chance to look it up
again, but I'm almost positive that the capacitance is rated at zero bias,
which I believe is where your ckt would be running in the 'normal' case. In
fact, I believe the cap. is -highest- at zero bias, and decreases slightly as
the voltage is raised towards the zener point.

Best solution is Sandy Blaize's suggestion of using two 1N4148 from the input to
ground, and using a bulb as a series impedance. All V-limiters need -some- sort
of series impedance or else they will be destroyed by the first spike. In many

cases, the signal source itself has some inherent impedance, so you don't need to add any, but in most cases you are better off adding your own series input impedance to make -sure- you are protected.

Two further comments:

A) The bulb is nice because it'll have pretty low resistance when cold, to limit losses, but the resistance goes up by a factor of maybe 10 when hot, which limits the current that the diodes have to handle. However, bulbs are thermal devices, i.e. they have very long time constants. It might be fine to protect from xmitter leakage, but it ain't gonna warm up at all between the beginning and end of a 1 microsecond 400v lightning-strike transient!

B) Instead of putting more diodes in series to handle higher signal levels, you might just want to tie one to a plus supply, like +12, and the other to a corresponding minus supply. While this saves on diodes, it of course diverts any input overload current into the supply. That may or may not be a problem depending on the variables of your situation.

Hope this all helps some.

Richard

Richard Hager

```
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+ http://www.millcomm.com/~ahha  email: ahha@millcomm.com -
```

From boatanchors@theporch.com Wed Jan 8 01:42:50 1997
From: sinned@VNET.IBM.COM
Subject: Receiver protection experience(s)
Message-ID: <199701072310.RAA13130@uro.theporch.com>

I tried using low voltage Zener(s) across the receiver antenna input, and as others have mentioned about Zeners, their capacity at RF caused a large drop in receiver performance.

Finally ended up with a pair of 1N100's back-to-back across the antenna to receiver connector. 1N100's are old germaniun diodes that should limit the maximum signal to .3v and they don't de-grade the received signal strength. These aren't high current diodes and are only good for a single "hit", so I check them occasionally with a ohm meter to make sure they haven't been zapped by something.

BTW: I use an antenna change-over relay to switch between transmitter
and receiver. Also, all receivers are disconnected from antennas when
I'm not actually on the air. Lastly, if I hear lightning QRN comming
up, I shut down the station, disconnect all antennas & AC power plugs
and go read old radio books 'till it's over.

Dennis W5FRS

From boatanchors@theporch.com Wed Jan 8 01:42:50 1997
From: "D.D. Todd" <dube3@n-link.com>
Subject: Re: Receiver protection experience(s)
Message-ID: <32D314FD.1E04@n-link.com>

sinned@VNET.IBM.COM wrote:

>
> I tried using low voltage Zener(s) across the receiver antenna input,
> and as others have mentioned about Zeners, their capacity at RF caused
> a large drop in receiver performance.I didn't copy some of this thread, and this point may already have been
covered:

I've seen (and used) ordinary silicon signal diodes paralleled (in
opposite directions) across antenna inputs. Forward voltage is about 700
mv, so any signal with peaks less than that won't be affected. And it
guarantees that no peaks above 700 mv, positive or negative, will pass to
the front end.

73,
Dube   K4DWW   dube3@n-link.com
Democracy will last only as long as it takes the people to learn that
they can
vote themselves largess from the treasury.
                                De Toqueville

From boatanchors@theporch.com Wed Jan 8 18:47:36 1997
From: Richard Hager <rhager@millcomm.com>
Subject: Re: Receiver protection experience(s)
Message-ID: <32D423CC.2B35@millcomm.com>

Recently posted to BA...

> Forward voltage (of silicon signal diodes) is about 700 mv, so any signal with peaks less than that won't be affected.
--

I've seen similar numbers posted many times, and in fact all the engineering magazines seem to keep repeating this number. However, you can get your behind bit by assuming this to be true -under all conditions-. I'm still rubbing a sore spot I got during commercial product design just last year.

In the first place, the turn-on voltage is a logarithmic curve, which most of us know, but this curve extends down to very low voltages, which most of us don't realize. You can have measurable conduction down to a couple hundred millivolts or less. This bit me earlier, when I was using a couple diodes to 'OR' two supply voltages from resistive dividers into an overvoltage detector.

What I didn't take into account was that the dectector was a high input impedance comparator, and the diode conducted enough to trip the comparator even when the voltage across it was well below 700mv. In my circuit, it would turn on the comparator at only 200-250mv delta across the diode. Although I never measured the current level at this delta-V (I changed the ckt to something more predictable) I think it was probably conducting around a uA of current at that point.

Whether the current flow at lower voltages will affect you or not will be dependent on the impedance of the ckt. In a 50ohm line, you won't notice it, but at a high-impedance node, a diode may well ruin the operation or Q of the ckt at as little as 100-300mv of signal.

At the higher end, virtually all the 1N4148 and 1N914's that I've measured have a Von of about 600mv at 1ma current. I have no idea where the heck they get that 700mv number. Maybe at 10ma of current, but no DMM that I'm aware of uses a 10ma current source on the diode check range.

Also be aware that with 200-400ma flowing, the Von is more like 1,000 - 1,500mv. In a case where a diode is being used to protect something from a voltage spike, it is entirely likely that there will be a substantial current spike in the diode.

Therefore, the limiting voltage will be much higher than you expect, if you're expecting 600-700mv. It probably won't matter much to a firebottle, but that $50 Tunnel Diode will be instantly fried by the extra few hundred millivolts.

Richard

Richard Hager

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From boatanchors@theporch.com Wed Jan 8 18:47:36 1997
From: "Barry L. Ornitz" <u856010@eastman.com>
Subject: RE: Receiver Protection Thread
Message-ID: <Pine.ULT.3.91.970108192714.27148C@dua150.kpt.emn.com>

I have been trying to go back and follow the thread about receiver front-end protection. I am not sure who started it, perhaps Roberta Barmore? Some of the suggestions have been pretty strange. Some will not work, and others might work after a fashion, but I am convinced that while this group is intimately familiar with vacuum tubes, few seem to understand the fundamentals of semiconductor diodes. This list is certainly not the place to go into semiconductor theory, so I will try to cover just a few highlights.

Of all the schemes suggested, Sandy, W5TVW'ís, seems the most promising. He mentions the nonlinearity of semiconductor diodes and suggests using an incandescent lamp as a nonlinear resistance ahead of the diodes. The key here is the long thermal time constant of the lamp. I'íll cover this more later.

Carl, KM1H, added some comments about the relative distortion levels created by different diodes but he got the order wrong. No semiconductor diode abruptly turns on at a fixed voltage. The current through the diode is an exponential function of the voltage across the diode. At higher currents, the internal resistance of the diode limits the current even more. Thus if you plot the diode current versus the diode voltage on LINEAR graph paper, it will _appear_ that a semiconductor diode has a "knee" in the curve where it appears to abruptly turn on. This is where the 0.7 volt figure for silicon diodes comes from. For germanium devices, this knee is about 0.3 volts. It is even less for Schottky barrier diodes, usually around 0.1 to 0.2 volts. If the input signal to a receiver approaches the knee voltage of any of these diodes, intermodulation and harmonics will be created.

Bobbi and others suggested Neon lamps. These offer very low shunt capacitance in the off state. However they typically take about 90 volts to "strike" (operating voltage is 15 to 20 volts less). Unless you are using a vacuum tube input that can take this sort of voltage, this is still rather high. The modern gas-tube arrestors like those of Siemens, etc. are available in a range of striking voltages from about 90 volts up to over 600 volts. When these tubes fire, they go into a arc conduction rather than a conventional gaseous conduction, leaving about 15 volts across the conducting gap. Again they have low capacitance in the off state.

Jim Berry suggested using a metal oxide varistor transient voltage suppressor in series with an RF choke on the antenna input. The RF choke, unfortunately is a high impedance at RF so it only lets low frequencies go through. If all you want is protection from DC static charges on the antenna lead, why not use just the RF choke?

A varistor has a very high value of shunt capacitance (inherent in how it works). Thus the varistor is not very useful across an antenna input either as its high capacitance will shunt desired RF to ground too.

Bob Roehrig, K9EUI, mentioned the General Instrument line of transient suppressor diodes. These are internally two high-reliability Zener diodes connected in series opposing. These diodes can have rather high current ratings if the pulse they are designed to suppress is short enough. But for a receiver front-end, their shunt capacitance is FAR too high.

Jim Garland, W8ZR, suggested the use of smaller Zener diodes again connected in series opposing. The problem here was correctly stated by Richard Hager - high capacitance. Jim disagreed saying the capacitance would be far less - the same as a small signal switching diode with forward voltage across it. I disagree.

To check this out, I ran a quick spreadsheet for a 1N753 6.2 volt, 500 mW Zener. At zero volts across the diode, it has a capacitance of about 350 pF. As you increase the FORWARD voltage, the capacitance gradually increases to 550 pF at 0.7 volts [not quite linear, the curve has a slight breakpoint in the middle]. If you reverse bias this diode, the capacitance will drop to around 160 pF just before the Zener breakdown occurs. In fact, with two Zeners in series opposing, the reversed biased one will have the lion'ís share of the voltage across it. As Morris Odell correctly points out, the changing capacitance of the Zener pair will cause distortion every bit as much as forward conduction. Dennis, W5FRS, spoke from experience saying that Zener protection diodes had more than enough capacitance to seriously degrade receiver performance.

Finally Larry Kayser, VA3LK, mentioned the diode protected dual-gate MOSFET, the 40673. These were not really conventional Zener diodes in construction like RCA showed on their schematics. They were really more like the avalanche breakdown devices found in the input circuits of many CMOS integrated circuits. For critical instrumentation applications, I found these protection diodes created minor but noticeable leakage currents and noise not seen with non-protected dual-gate MOSFETs. Even though the 40673 was a solid-state device, it had many of the "warm and fuzzy" characteristics of vacuum tubes that we all love!

So after all this discussion, I still tend to agree with Sandy, W5TVW. Use several small signal silicon diodes in series in parallel with an equal number of small signal diodes connected in the opposite polarity. Even though the diode "knee" is not sharp, this will tend to increase the signal level required to produce serious intermodulation. These go from the receiver antenna terminal to ground. Connect a small lamp between the antenna lead and the antenna terminal. With low level inputs, this lamp will act as a low resistance. With higher level inputs, the filament will heat and raise the resistance significantly. This effect, while nonlinear, creates little distortion because of the thermal inertia of the filament prevents the resistance from changing over an RF cycle. I have used the tiny "grain-of-wheat" lamps for this application successfully.

If anyone is interested, email me at the address below for the full math equations used to generate the spreadsheet. I used the nonlinear equations used in SPICE. The 1N753 diode was one I had quite complete SPICE parameters for; I may have similar parameters for other diodes too.

73, Barry L. Ornitz WA4VZQ ornitz@eastman.com

From boatanchors@theporch.com Wed Jan 8 21:53:05 1997
From: pmills@A.crl.com (Phil Mills)
Subject: RE: Receiver Protection Thread
Message-ID: <199701090117.AA26301@A.crl.com>

>
>So after all this discussion, I still tend to agree with Sandy, W5TVW.
>Use several small signal silicon diodes in series in parallel with an
>equal number of small signal diodes connected in the opposite polarity.
>

Barry, thanks....

I've been following this thread with keen interest as I'd obviously like to protect my BA receivers. Now, since I'm not a EE, and don't have the faintest idea of what a "small signal silicon diode" is, could someone please share a part number with me...(to me, a small diode is a 6AL5 and a large diode is a 6H6....)....and since the word "several" appears in the scheme, are we talking about putting them in parallel with polarities reversed?

The grain-of-wheat bulb idea really sounds good too.

thanks & 73,
Phil
.
Phil Mills, AB5TH   *****   *****
pmills@a.crl.com
281-992-5762 days
Friendswood, TX   (south of Houston)

From boatanchors@theporch.com Wed Jan 8 21:53:05 1997
From: Jim Garland W8ZR <4CX250B@miavx1.acs.muohio.edu>
Subject: RE: Receiver Protection Thread
Message-ID: <v03007804aef9eb660bb1@[134.53.65.12]>

Barry L. Ornitz WA4VZQ ornitz@eastman.com wrote:

>Jim Garland, W8ZR, suggested the use of smaller Zener diodes again
>connected in series opposing. The problem here was correctly stated by
>Richard Hager - high capacitance. Jim disagreed saying the capacitance
>would be far less - the same as a small signal switching diode with
>forward voltage across it. I disagree.
>
>To check this out, I ran a quick spreadsheet for a 1N753 6.2 volt, 500
>mW Zener. At zero volts across the diode, it has a capacitance of
>about 350 pF. As you increase the FORWARD voltage, the capacitance
>gradually increases to 550 pF at 0.7 volts [not quite linear, the curve
>has a slight breakpoint in the middle]. If you reverse bias this
>diode, the capacitance will drop to around 160 pF just before the Zener
>breakdown occurs.

Barry and Richard (and some others as well) are completely correct in their analysis, and I hereby stand corrected and withdraw my suggestion. Series-connected zeners are clearly not appropriate for receiver front-end protection, because of their intrinsic capacitance. Out of curiousity, I tested a 6.2V 500mW zener on my capacitance meter and found it measured 344pF in one direction and 455 pF in the other. (Even though the measurements are nominally made at zero bias, there apparently is a slight d.c. offset voltage applied by my tester.) In any case, the zener capacitance is far too high to make zeners a useful protection device for any application at r.f. frequencies. The capacitance is much higher than I would have imagined, and I'm grateful for having this fact brought to my attention. Incidentally, I also checked an ordinary 1N914 diode, and it measured 2.7pF, which is happily quite acceptable.

73,

Jim W8ZR

From boatanchors@theporch.com Wed Jan 8 21:53:05 1997
From: "Roberta J. Barmore" <rbarmore@indy.net>
Subject: RE: Receiver Protection Thread
Message-ID: <Pine.SUN.3.91.970108221847.25766D-100000@indy2>

Hi!

Actually, I suggested a *biased* neon lamp; while this involves a bit of Rf choke-and-condenser folderol, not to mention a small power supply that one doesn't mind finding melted down to slag every once on a blue moon, it'll take the striking voltage down to something useful and (here she goes, folks, about to be tarred, feathered and rid out of town on a rail by the serious-theory fellows) *should* have the effect of reducing the p-p AC swing by the amount of the bias voltage.

Sandy's notion still sounds about the best to me, too--though I'm presently wondering if hot-carrier diodes might work better--faster and a little more like the mythical "ideal diode." The lower Von drop doesn't count--one's still got to stack a few of 'em up. Any thoughts on this?
(I have either 48 or 96 HC diodes, used in a box--took 'em out of the 12W video modulator in the old TV rig when a *few* of 'em went unmatched [or open or shorted--but I only found one real fink in the batch, which wanted to be a wire]. Silly things are all in parallel and have to be a matched group; you can't just change out one. So I've got some to play with).

73,
--Bobbi

From boatanchors@theporch.com Wed Jan 8 12:04:14 1997
From: "Paul Bock" <pauboc@smtplink.pulse.com>
Subject: Re[2]: WWV??? Funky props!!
Message-ID: <9700088527.AA852754452@smtplink.pulse.com>

Thanks to all those who have confirmed the cause: Funky propagation, indeed! Who'da thunk it? No wonder I was able to work a ZL3 on 40 CW about 0300 UTC last week from the East coast (and he was 589, too!).

Paul, K4MSG

From boatanchors@theporch.com Wed Jan 8 01:42:50 1997
From: mashaum@fcg.net (Mark Shaum)
Subject: Re: SB-401 notes and a beware on switch cleaning
Message-ID: <M.010797.195358.27@Default>

Hi, Phil and BAfolk. Yep, I think in your case, using a receiver with a completely different conversion chain, just keying the mixer ought to cover the needed bases.

One off the wall comment here.. my SB301 eventually went through a complete (except for the PTO) solid state conversion. Worked pretty nice, too, with RIT, PBT, noise blanker et al. Due to continuing intermittant bandswitch contacts, I tried to use silver cleaner on the switch. In less than a minute, the (very) thin silver plating disappeared, leaving rapidly oxidizing base copper or whatever alloy may have been used. (!). This unit is still on the shelf here, awaiting my finding a very cheap 301 to rob the whole bandswitch from! At the time (1984ish) I wasn't aware of available contact cleaners outside of Freon TF and such.

73! - Mark
> Mark, thanks for the info. I think the 2nd mixer should be keyed and if
> it were, it would eliminate my problem. The odd thing about this is....
> I was first using the SB-401 with an R388. The R388 seemed to work okay
> but did not have the selectivity I needed (and this is with 51J4 mech
> filters in it!), but I never heard the hetrodytne. Anyway, I moved the
> R388 out and put in my recently aligned R390A....this is when I noticed
> the hetrodyne. Hopefully, one of these days I'll get an SB301 to pair
> this thing up with.
>
>
>

Mark Shaum, K9TR
mashaum@fcg.net

From boatanchors@theporch.com Wed Jan 8 01:42:50 1997
From: "Barry L. Ornitz" <u856010@eastman.com>
Subject: RE: Scientific Radio Systems Antenna Tuners
Message-ID: <Pine.ULT.3.91.970107185316.25763A-100000@dua150.kpt.emn.com>

Michael St.Angelo, N2MS, mentioned SRS antenna tuners in a recent post. These are really FINE tuners for Boatanchor radios _IF_ you can pre-tune them to the desired frequencies. RF Buchanan, KF4FJH, wrote about using these tuners in Saudi Arabia with "channelized" radios - something important to note.

These tuners were typically built to handle a wide range of impedances but they are rather inconvenient to tune. You basically picked the antenna length, a whip around 20 to 35 feet in length, or an end fed "long wire" of around 150 feet in length. Actually many other combinations can be used but these tuners were optimized for these two types. Knowing the type of antenna, you then picked the frequency band for a particular channel. From this, you looked in a table and picked the actual physical arrangement of the impedance matching network and the approximate value of the components. These were installed and wired to the switch for that particular channel. This procedure was repeated for all 12 "channels". Then the tuner and antenna were installed and the adjustable components tuned for minimum VSWR.

The big Amphenol MS connector (now likely far more expensive than the surplus tuner) was wired to a companion connector in the radio. Choose the desired channel and within a second or two (allowing the motor driven switch to come to rest), you were ready to transmit.

This is quite different from typical ham operation with something like the Johnson Matchbox. Here you can have almost anything reasonable for an antenna (rusty screen door with a one-eyed tomcat climbing on it) because the tuner is designed to be adjustable over a wide range. Of course you DO have to adjust those big knobs to get a match. And as you tune across a band, you typically tweak the Matchbox as you go.

If you have only one antenna, and only operate over very limited portions of a ham band, a SRS tuner will do a fine job. But for flexibility, virtually nothing beats that old Matchbox.

Having said all of this, though, I'll tell you why I bought one at Dayton a few years ago (I have the manual which I will be happy to copy).

-----> FIELD DAY <-----

The ultimate challenge for a Boatanchor radio enthusiast.

This past year at Dayton, I made a side trip up to Lima (Fair Radio) and completed my collection of the old 3-foot MS military surplus mast sections [MS-40-something to MS-50-something]. I figure these should make up a nice, easy to erect, 25 to 30 foot vertical - one that could go up in minutes and be guyed with that 1/8" fluorescent rope so plentiful at hamfests. Unroll some precut ground radials. Clip the antenna and ground

to the SRS tuner. Attach a multiconductor cable leading to a remote switch next to the rig, then coax, pop a top of a cold 807 - and you are ready to go on the air. With some luck, you might beat the guys with the bow-and-arrows getting some dipoles into the trees. Of course your well-oiled assistant has already fired up the generator, adjusted the voltage and speed, and set up your operating table. Erecting the tent can wait!
:-)   :-)   {Trust me - it NEVER rains on Field day!}

The real clinker here is that you had already set up the same antenna in a similar geometry previously, and had already tuned the tuner components. Murphy naturally rules so the VSWR will never be low enough for a fancy Yaecomwood but an old Boatanchor rig usually does not mind a little Vizzwahrrr [only wimps spell out S-W-R; pronounce it with the proper roll on the r's.]. I recommend you set up the tuner for the high, middle, and low of 80 meters, high and low ends of 40, and use the rest of the taps for each of the higher bands. This should get you close enough until the better antennas are erected and provides a fine antenna for the novice station too.

73, Barry L. Ornitz WA4VZQ ornitz@eastman.com

From boatanchors@theporch.com Wed Jan 8 12:04:14 1997
From: midshires@cix.compulink.co.uk (Andrew Emmerson)
Subject: Searching for Janes and other books
Message-ID: <memo.126635@cix.compulink.co.uk>

> I finally found a copy of the 1987 edition at a used bookstore for about $75, after months of searching.

You don't have to!!! That was the whole point of my previous posting about book searchers -- they do the donkey work for you. Book searchers make their living by taking lists of titles people want and finding them! They often subcontract the work to 'scouts' -- students, housewives and other people with time on their hands -- and they have a high success rate at finding even the most obscure of titles. You can either set the top price you are prepared to pay or just let the searcher report back to you what they find. Because they are in the trade, they can normally negotiate keener prices than you could, so you don't end up paying a premium over the price you would have paid if _you_ found the book in a secondhand book shop.

No reputable book searcher makes any up-front charge for searching, nor are you ever obliged to take a book they have found for you.

In the USA I have had very good results with...

CUL PIN'S BOOKSEARCH INTERNATIONAL, 3827 West 32nd Avenue,
Denver, Colorado, 80211, USA (+1 303 455 0317, fax +1 303 433 8040).

Kate LAUGHLIN, The Book Searcher, 3637 Ash worth Ave. N., Seattle, WA
98103, USA (+1 206-632-6993).

KEYSTONE BIBLIOPOLIST, Box 34427, Omaha, Nebraska, 68134, USA (tel/fax +1
402 571 6965).
Also sells huge selection of technical literature in the field of vintage technology; ask for catalogue

Try them and save your shoe leather!

73, Andy.

From boatanchors@theporch.com Wed Jan 8 21:53:05 1997
From: provero@connix.com
Subject: SP-210/BC-779, R-392, SRR-13 Pages Updated
Message-ID: <199701090314.WAA07572@comet.connix.com>

For those interested in the subject receivers, the web pages have been updated.

Most extensive mods are to the SP-200/BC-779 page, which now includes Tables 1, 2 & 3 from the manual -- tube socket voltage and resistance measurements.

    http://www.connix.com/~provero/

Still looking for images...........

```
P.J. "Josh" Rovero      home:   provero@connix.com
Meteorologist          radio:   KK1D
Oceanographer           work:   rovero@sonalysts.com
Curmudgeon-at-Large      web:   http://www.connix.com/~provero/
```

From boatanchors@theporch.com Wed Jan 8 01:42:50 1997
From: Larry Godek <AZCOT@gnn.com>
Subject: SP-600 Trivia
Message-ID: <199701080035.TAA18874@mail-e2b.gnn.com>

On page 47 of the classified ad section (you know where the pix of all the good parts and BA tuners are) which is in the Hammarlund section, is a full paged ad of the "Series 600 "Super-Pro"". Even has a cabinet but don't look like any SP-600 I ever saw. Course none of the military 600's I saw had a cabinet. Funny looking thing.

Included is a nice description and some of the specs.

Larry Godek W0OGH
AZCOT@gnn.com

Gilbert, AZ. 85233

Ex-W6KQL, W8BPV, DL5LS, K0TAO, KN6TUP

From boatanchors@theporch.com Wed Jan 8 01:42:50 1997
From: Bob Roehrig <broehrig@admin.aurora.edu>
Subject: Re: SP-600 Trivia
Message-ID: <Pine.ULT.3.95.970107185040.16794A-100000@admin.aurora.edu>

On Tue, 7 Jan 1997, Larry Godek wrote:

> On page 47 of the classified ad section (you know where the pix of
> all the good parts and BA tuners are) which is in the Hammarlund
> section, is a full paged ad of the "Series 600 "Super-Pro"".

Page 47 of what????????

E-mail broehrig@admin.aurora.edu 73 de Bob, K9EUI
CIS: Data / Telecom Aurora University, Aurora, IL
630-844-4898 Fax 630-844-5530

From boatanchors@theporch.com Wed Jan 8 12:04:14 1997
From: vancleef@netcom.com (Henry van Cleef)
Subject: Re: SP-600 Trivia
Message-ID: <199701080617.XAA10670@netcom2.netcom.com>

As Larry Godek discourses
>
> On page 47 of the classified ad section (you know where the pix of
> all the good parts and BA tuners are) which is in the Hammarlund
> section, is a full paged ad of the "Series 600 "Super-Pro"". Even
> has a cabinet but don't look like any SP-600 I ever saw. Course
> none of the military 600's I saw had a cabinet. Funny looking

> thing.
>

Since I have a copy of Moore, I know that Larry is talking about the picture of the prototype SP-600 shown in the 1948 ARRL Handbook, which I also just happen to have.

The picture is a drawing, not a photo. The copy says that it is "double conversion," but does not list the second IF frequency, only that it has the "famous SUPER-PRO crystal filter" in the 455 Kc. I.F. channel. It also lists the tubes----17 tubes plus 5U4G rectifier and VR150 voltage regulator.   3-6BA6, 2-6BE6, 2-6C4, 4-6SG7, 1-6SH7, 2-6H6, 1-6J5, 2-6V6.

I've always been amused at these tube lists. Not only are there "N" tubes in the set, but here they are. One does have to wonder at a design that mixes 6SG7's with 6BA6's, and so forth. I would have expected to see 6BA6 throughout, and 6AU6 rather than 6SH7. Also 6AL5 instead of 6H6. The 9-pin stuff wasn't around in '47, so I am not surprised to see the 6J5.

Of course, when it comes to mix-n-match with physical tube construction types, Philco takes the cake----sets with 1232 loctal, a bunch of octal tubes---and a 41 or 42 output tube.

--

===

Hank van Cleef
E-mail vancleef@netcom.com or vancleef@tmn.com

===

From boatanchors@theporch.com Wed Jan 8 18:47:36 1997
From: Morris Odell <morriso@vifp.monash.edu.au>
Subject: Re: SP-600 Trivia
Message-ID: <32D411EB.2517@vifp.monash.edu.au>

Hi all,

Hank wrote:

> It also lists the tubes----17 tubes plus 5U4G rectifier and
> VR150 voltage regulator.   3-6BA6, 2-6BE6, 2-6C4, 4-6SG7, 1-6SH7,
> 2-6H6, 1-6J5, 2-6V6.
>
> I've always been amused at these tube lists. Not only are there "N"
> tubes in the set, but here they are.

This was a common practice back in the 50s and early 60s when I was a lad. Radios were advertised with the number of valves as a "feature". The more valves presumably the better. A 4 valve radio (usually a cheap reflex set) was pretty plebeian. A 5 valve mantel was the standard. A 6 valve "console radiogram" was a luxury item. Only the most wealthy could afford something imported with 7 or 8 valves and a shortwave band that worked. Something with as many as 17 valves was unheard of - strictly for the professionals. When TV began here in 1956 and sets were advertised with 20 valves or more it was the beginning of future shock!

This sort of thing guaranteed that kids of my vintage interested in radio developed a suitable awe for those glowing bottles. Even though a lot of sand has flowed under the bridge since, there's still a thrill associated with looking in something like a Tek scope and seeing (Wow!) 50 valves!!!

Morris

Morris Odell   Victorian Institute of Forensic Medicine
Forensic Physician   57-83 Kavanagh St, Southbank 3006
morriso@vifp.monash.edu.au   Victoria,
Australia

Web page: http://www.vifp.monash.edu.au/CFM/staff/mo.html

From boatanchors@theporch.com Wed Jan 8 18:47:36 1997
From: jproc@bellglobal.com
Subject: Re: SP-600 Trivia
Message-ID: <Chameleon.4.01.2.970108171856.jproc@jproc.bellglobal.com>

>there's still a thrill
>associated with looking in something like a Tek scope and seeing (Wow!)
>50 valves!!!

Morris,

You should see the VK5 radar indicator with the access doors open. It has 105 valves. Too bad most of the tubes have shields.

Regards,

Jerry Proc VE3FAB
E-mail: jproc@bellglobal.com
Radio Restoration Volunteer
HMCS Haida Naval Museum
Toronto, Ontario

From boatanchors@theporch.com Wed Jan 8 18:47:36 1997
From: Larry Godek <AZCOT@gnn.com>
Subject: SP-600 Trivia
Message-ID: <199701090030.TAA14875@mail-e2b.gnn.com>

I knew it when I pushed the return key on the keyboard. Oh well, to late now. Fortunately Hank has seen the same pix. I thought it was a photo. 1948 ARRL handbook.

Larry Godek W0OGH
AZCOT@gnn.com

Gilbert, AZ. 85233

Ex-W6KQL, W8BPV, DL5LS, K0TAO, KN6TUP

From boatanchors@theporch.com Wed Jan 8 21:53:05 1997
From: gcr2@po.CWRU.Edu (George C. Rybicki)
Subject: SP600 Audio ?
Message-ID: <199701090250.VAA11187@piglet.INS.CWRU.Edu>

My Sp600 (JX14/R274C) tend to distort the audio on strong AM stations. If I back off the RF gain I get the usual HiFi audio the set is famous for. IS this common?. Seems to be an AGC fault, I can get some slightly better behavior by changing the value of the external cap mounted at the AGC terminals on the rear of the set. I tried swapping and replacing the 6AL5's in that area of the circuit but no luck. Any suggestions. 73 George

From boatanchors@theporch.com Wed Jan 8 21:53:05 1997
From: pmills@A.crl.com (Phil Mills)
Subject: Space Spanner
Message-ID: <199701090054.AA24891@A.crl.com>

Many thanks to Mike Sanders for the Space Spanner receiver he sent me. (Mike, I sent you private e-mail but it bounced...maybe I screwed up on your address). Anyway, it looks great and works great. This little radio is the same as the first kit I ever built and is the first tube type receiver that I ever had....listening to the 40 meter ham bands is what really got me started in radio. This receiver came with the factory case....back when I built mine, about 40 years ago, I built the case out of wood from apple crates (my dad worked in a grocery store).

thanks & 73,
Phil
.
Phil Mills, AB5TH   *****   *****
pmills@a.crl.com
281-992-5762 days
Friendswood, TX   (south of Houston)

From boatanchors@theporch.com Wed Jan 8 01:42:50 1997
From: DCPIN@aol.com
Subject: Stancor SA-403-A Clipper-Filter
Message-ID: <970107191635_238868651@emout03.mail.aol.com>

I was at a hamfest this last weekend and found a little item that may be of some interest to one of the AM guys.

It is a 2 tube (6j6's) device made in a small minibox with an octal plug. It was made by Standard Transformer Corp. in Chicago. I have the original little 15 page pamhlet, manual for it. There are discussions about speech processing and a bibliography or suggested reading list in it with articles and books dated in the 40's. It has the schematic and suggestions where to incorporate this device in transmitters.

I picked it up so that I could pass it to this group and thereby make a contribution. If nobody wants it that's fine but I offer it to you all.
I bought it for $5.00 and would give it to a BAer for that plus whatever it costs to mail.

Chris KO4QW

From boatanchors@theporch.com Wed Jan 8 18:47:36 1997
From: rhys@ix.netcom.com (Lawrence D. Walken)
Subject: Re: Stark Test Equipment
Message-ID: <199701082346.PAA06079@dfw-ix8.ix.netcom.com>

Howdy Gang --

I've been offered at $50 a Stark brand signal generator from the '60's.
No model number was given but the following info was passed on: goes up to 200MHz, about a ten tube complement, output metered in microvolts.
It's apparantly a biggie -- on the order of an HP 606 weighing in at

about 50 lbs.

I've searched all my catalogs from the '60's (allied, cameradio, etc.)
and can't find it although it sounds interesting. Anybody out there
got any experience or info on this one.

If I do decide to get it the next questionis will the shelf above the
test bench support it? Thanks all.

Larry Wolken N3OJD
(202) 291-9303

From boatanchors@theporch.com Wed Jan 8 18:47:36 1997
From: "Deane D McIntyre" <dmcintyr@acs.ucalgary.ca>
Subject: Re: Stark Test Equipment
Message-ID: <9701082359.ZZ028113@ds1.acs.ucalgary.ca>

In message <199701082346.PAA06079@dfw-ix8.ix.netcom.com> writes:
>
> Howdy Gang --
>
> I've been offered at $50 a Stark brand signal generator from the '60's.

Stark was a Canadian company located in Ajax, Ontario that made
test equipment and the like. They also sold kits but were never
real competation to Heath and EICO.

I have a Stark VTVM as well as a Stark sand-state regulated 0-40V
1 amp power supply. Both work OK but are hardly comparable to HP
in quality...more like Heath/EICO.

Don't know anything about the Stark signal generator however.

73, Deane D McIntyre VE6BPO
Deane@deane.bio.ucalgary.ca
dmcintyr@acs.ucalgary.ca
http://deane.bio.ucalgary.ca/

From boatanchors@theporch.com Wed Jan 8 01:42:50 1997
From: launerb@crl.com (William H. Launer)
Subject: Re: SX-117 Selectivity
Message-ID: <v0153050caef8560b480c@[192.0.2.1]>

Greg Anders wrote:

>It would make sense to me that an oscillascope would be more accurate
>than an s-meter if you have one.

I agree, since s-meters have a degree of damping, they aren't as sensitive as a scope when looking for a peak voltage. A scope, used as a dc voltmeter, connected to the avc voltage, or into the s-meter circuit would allow easier peaking of the circuits. In my case, the s-meter was there, and the scope was on the shelf, so I opted for the s-meter to see if the method worked. The results were excellent, so I was satisfied.

Caution: If you use a scope that has a single-ended input to read voltages referenced to something other than chassis ground, be sure to isolate the scope chassis from ground (3-pin power cords are notorious). I use a common 3 to 2 pin ac adapter for this purpose, with the third pin (ground) left disconnected. Also, ALWAYS be careful when poking around in powered-up boatanchors!

73, Bill wb0cld

Bill Launer
St. Charles, MO
launerb@crl.com
wb0cld@wb0cld.ampr.org [44.46.66.25]
qrp-l #279   qrp arci #3551
Grid Square EM48RT

From boatanchors@theporch.com Wed Jan 8 01:42:50 1997
From: k9gdt@juno.com (George P Sieverson)
Subject: The R174 Lives!
Message-ID: <19970107.195223.3766.3.K9GDT@juno.com>

Greetings bulbaholics,

A package from AES arrived today. Within minutes, the missing tubes were installed in the R174. (Oooh! Oooh!) Shortly thereafter, a speaker, two regulated bench supplies, two digital voltmeters, and a "short wire" antenna were connected to the receiver. BTW, does anybody know why radio pioneers called this stuff "wireless"?

Time for the smoke test.... (Drum roll, maestro!)
Crank up filament power supply. 1.45v - Check.
Crank up HV power supply. +90.0v - Check.

Voila! CHU! BBC! VOA! The radio works on all bands with good dial calibration, although band 3 needs to be tweaked a bit. The BFO even works. Life is good!

Now the ugly stuff. The receiver's matching PP-308/URR - Power Supply is a basket case. Further examination under the chassis revealed cut wires, new wiring, and a modern bridge rectifier. Mods are OK with me, but these weren't documented. =8-O   Hmmmm....

The matching power supply houses the R174's speaker. Frankly, this speaker sounds awful, so I hooked up a $10 rat shack "lo-fi" speaker. Aaaaah!   This is a nice setup for SWLing.

I think I'm going to forsake the R174's matching supply/speaker and build a small 110v supply from scratch.

FYI, here's the current drawn by the R174:
1.45v filament: 478ma.
+90v   B+   :   49ma

If anyone wants parts from the PP-308/URR, just let me know. Anything the prior owner left in there can be yours for the cost of shipping! Don't forget....that fungus-proofed, moisture resistant "non-fi" speaker can be yours, too!

Thanks for the many offers of material and technical support. What a group! This is my first exposure to military BAs, so the help is genuinely appreciated.

Cheers, beers, es 73,
George
****
George Sieverson
Barrington, IL
K9GDT@JUNO.COM
****

From boatanchors@theporch.com Wed Jan 8 12:04:14 1997
From: "Jim Wilson-EJW012" <Jim_Wilson-EJW012@email.mot.com>
Subject: URM-25D distortion on negative peak
Message-ID: <Macintosh */PRMD=MOT/ADMD=MOT/C=US/@MHS>

From: Wilson-EJW012 Jim on Wed, Jan 8, 1997 12:09 PM
Subject: URM-25D distortion on negative peak

BA Folks -

I have recently acquired and am working on a URM-25D and have encountered a distortion on the negative peak of the RF output (both at the attenuator and the X-200K outputs). The negative peak is more rounded than the positive peak and has a noticeable 'flatted' portion on the negative slope just before the 'peak'. This distortion was present when I got it (gov't recond. from Fair) before I started working on it. I have replaced all of the paper caps as per Dallas Lankford's HSN write-up. All tubes are new and checked. I've cleaned up the power supply (150v and B+) from both ripple and signal mod. My 'scope is fine and displays HP 606A output without distortion. It seems to be on all freqs, but is easier to see on lower freqs. It is present when RF out is terminated with 50R and without.

If I hang my scope on the Output tube (V103 - 6AG7) grid it looks fine -- when I put it on the plate it is distorted. However, if I pull the next (and final) downstream tube V104, the 5726 VTVM diode while looking at 6AG7 plate I loose the distortion. Likewise, if I unplug P103 (output to attenuator), I loose the distortion. Voltage and resistance at both of these tubes is within tolerance and I also tried several swaps for each. The carrier control and RF sensitivity calibrate nicely so output to the attenuator is ok. If I put an HP 355D attenuator on output of J103 I get the same distortion. Run the HP606A through the -25's attenuator and it looks fine.

The VTVM works (according to the TM) by: "...first diode (pins 1/7) is arranged to rectify the negative signal peaks. The second diode (pins 2/5) is connected inversely and serves to cancel the residual potential of the peak reading..." -- now this sounds like a likely culprit, but I can't find a problem. Strong sawtooth on 5814 diode 1 plate (pin 7).

Two other questions/comments:
1. The TM says that the B- is not grounded at the supply chassis , but only at the audio/mod chassis to eliminate RF leakage due to ground voltage gradients -- apparently as part of the overhaul (1983 at Tobyhanna) the filter caps were replaced with units that are not isolated from the chassis.

2. TM says grid of V107 6AH6 (% Mod / Audio Out / XTAL CAL Out) should be 0 volts but I read 36 VDC -- I have the Changes through #6 and this is not changed -- zero doesn't seem right to me, comments.

Has anyone else seen and solved this distortion on the -25 series, or are the symptoms that I described diagnostic enough for one of you folks to point me in a fruitful direction?

Regards, Jim

Jim Wilson
3815 NW 72 Dr.
Coral Springs, FL 33065-2244

tel: 954-723-4532 (day); 954-341-3306 (eve)
fax: 954-723-5064
email: EJW012@email.mot.com

From boatanchors@theporch.com Wed Jan 8 21:53:05 1997
From: Richard Hager <rhager@millcomm.com>
Subject: Re: URM-25D distortion on negative peak
Message-ID: <32D43A75.4D73@millcomm.com>

Excellent post on URM25D problem snipped...

I don't have a 25D and can't help Jim on his, but I just wanted to compliment him on one of the best descriptions of problem and symptoms that I've ever seen.

After doing years of tech support work on CNC controls, I can't begin to tell you the frustration caused by lazy and/or undisciplined clients who give sloppy and inaccurate symptom reports, and/or refuse to write things down as they happen for later accurate reporting.

Jim's post was a model of clarity and detail. As I was reading it, every time I started to think "yeah, but what about..", there was the answer in the next paragraph! Nice work Jim.

Also, he's already tried the obvious and simple, but important, tests that help isolate problems. For example, putting the atten on another generator, and the other generator's atten on the URM25. And he -told- us about it too, so that we don't have to send a hundred unneccesary letters suggesting that he try that.

Like I said, nice work Jim. Hope you get it fixed soon! And I bet you will with your obviously sound approach to troubleshooting.

Richard
--

        Richard Hager

+ Ah-ha! Design Group, Inc.   -
+ Precision CNC Technology, since 1991 -
+ 612-641-1797, Fax: 612-641-8681   -
+ "I just like to make things" So...   -
+ ...please call Ah-ha! directly for CNC info   -
+ http://www.millcomm.com/~ahha email: ahha@millcomm.com -

From boatanchors@theporch.com Wed Jan 8 21:53:05 1997
From: Richard Hager <rhager@millcomm.com>
Subject: Re: URM-25D distortion on negative peak
Message-ID: <32D43AD0.2075@millcomm.com>

PS: I wanted to mention that I once had a Measurements 80 generator with
the exact same problem. I never did figure it out, but I admit to giving
up on it rather early, as I was getting a newer generator soon.

After hearing Jim's story, I'm glad I gave up on mine! What a
hair-puller...

Richard

```
--

        Richard Hager

+ Ah-ha! Design Group, Inc.           -
+ Precision CNC Technology, since 1991  -
+ 612-641-1797, Fax: 612-641-8681         -
+ "I just like to make things" So...         -
+ ...please call Ah-ha! directly for CNC info    -
+ http://www.millcomm.com/~ahha  email: ahha@millcomm.com -
```

From boatanchors@theporch.com Wed Jan 8 18:47:36 1997
From: jcreid@CCGATE.HAC.COM
Subject: Uses for PM tubes
Message-ID: <9700088527.AA852766946@CCGATE.HAC.COM>

Gang,
  A colleague of mine just donated a couple of photo-multiplier tubes to my junk box. These are 931-A's, vintage 1970 or so. Neat looking tubes, but I was wondering what kind of cool things could you do with them. What were PM tubes originally used for? Anyone have a couple 11 pin octal-like tube sockets?? Questions, questions.... Thanks in advance for any responses.

-Jim N6SVS
jcreid@ccgate.hac.com

From boatanchors@theporch.com Wed Jan 8 21:53:05 1997
From: jproc@bellglobal.com
Subject: RE: Uses for PM tubes
Message-ID: <Chameleon.4.01.2.970108195111.jproc@>

>What were PM tubes
>originally used for?

Jim,

Process control equipment, movie projector sound detectors, garage door openers are a few that come to mind.

Regards,

Jerry Proc VE3FAB
E-mail: jproc@bellglobal.com
Radio Restoration Volunteer
HMCS Haida Naval Museum
Toronto, Ontario

From boatanchors@theporch.com Wed Jan 8 21:53:05 1997
From: Morris Odell <morriso@vifp.monash.edu.au>
Subject: Re: Uses for PM tubes
Message-ID: <32D460FA.3337@vifp.monash.edu.au>

Gang,

Jim wrote:

> ...photo-multiplier tubes ... 931-A's, vintage 1970 or so. Neat > looking tubes,
> wondering what kind of cool things could you do with them. What were > PM tubes originally used for?

This brings back a few memories. PM tubes were ultra sensitive photodetectors which achieved very high gain (millions) by the cascaded use of secondary emission electrodes called dynodes. The 931A has 10 stages (I think - haven't got the book in front of me) and had a sensitivity of about 10 amps per lumen - that's right AMPS, when a typical cesium photoelectric cell had a sensitivity in the microamps per lumen. I remember looking at this in books and wondering what such a tube could possibly look like or be used for.

The only BA I've ever seen that used one was an "Electronic Yarn Inspector" made by the Lindley Corp of Mineola in the USA. It was a device used in the textile industry for scanning yarn during the "warping" process and was quite a machine to my youthful eye. The application involved 581 fine nylon threads that were unwound off individual bobbins in a huge frame at high speed. The threads were formed into a parallel "sheet" prior to being wound onto a metal beam which was used to provide the warp threads on a knitting machine. As the presence of fluff and imperfections would affect the material, this device was used to monitor fibre quality. It used a light beam provided by a lamp fed by an RF oscillator at 100 KHZ or so to provide a ripple free light source. The beam was precisely aligned along the yarn sheet as it passed through a comb mounted on a special mechanically stable platform. The beam shone onto the 931A and its signal was processed by lots of tubes in a 19" rack including a pulse discriminator of some kind and used to stop the winding process if an imperfection was detected. It was exquisitely sensitive and could detect a single tangled thread the size of a human hair.

BTW the warping machine itself used a dc motor controlled through a couple of huge mercury vapor glass thyratrons. Each was about 2 feet high and about 8 inches in diameter. You can imagine what they looked like when it was running!

I've gone on a bit about this even though it was not radio related, you can be sure the equipment was certainly a boatanchor.

Morris

--

Morris Odell   Victorian Institute of Forensic Medicine
Forensic Physician   57-83 Kavanagh St, Southbank 3006
morriso@vifp.monash.edu.au   Victoria,
Australia

Web page: http://www.vifp.monash.edu.au/CFM/staff/mo.html

From boatanchors@theporch.com Wed Jan 8 21:53:05 1997
From: dr.electron@juno.com (Richard L Paton)
Subject: RE: uWAVE
Message-ID: <19970108.194724.9598.1.dr.electron@juno.com>

JACK;
Thanx for Pub info. I used to have access to the Base Technical Library here at Vandenberg AFB, I really miss it. LOTS & LOTS of old Spacechargistor data there.
Said radar was an SPS - ninety something or other, 92? 94 ? I was in

avionics then, Uss Constellation.
Target Illuminator. Probably high L band. Brute Force always works; it just weighs more.
The old GE Gerts site at VAFB was not salvaged; rumor has it it may become some sort of non-virtual museum. We are talking some very serious thermionics here, right down to the dual-triode (6829?) flip flops, holding relays in a logic state, 32 bit registers......dual 4PR1000A modulator & just about every sort of tube circuit (our) money could buy. The spares / logistics area probably put a strain on U.S. tube production capability. Anyone else have experiences with similar pig iron & glass?
Incidentally, in New Jersey, my dad's work was directly across Route 10 from the main TUNG-SOL plant. Ah, dumpsters............ we had a lot of acquaintences who worked there. Most likely affected me somehow...
Still checking on your mag.   Cathode Current Dittos !
Rich P

# # #

From boatanchors@theporch.com Wed Jan 8 18:47:36 1997
From: BEN NOCK <106312.1035@compuserve.com>
Subject: Valves Wanted
Message-ID: <199701081348_MC1-E62-43C3@compuserve.com>

I want valves: UY510B
UF134   2 OFF
UF109
UZ133
UZ135

Can anyone help ?

Ben G4BXD.

From boatanchors@theporch.com Wed Jan 8 01:42:50 1997
From: DCPIN@aol.com
Subject: Viking II Tuner? Question
Message-ID: <970107182635_439798139@emout18.mail.aol.com>

Has anyone heard of a Viking II tuner? I guess it would have been made sometime between the matchbox and the present MBV-A. Any ideas? I need a fairly quick answer, a guy is trying to sell me one, and I have no recollection of any other models....Thanks..

Chris KO4QW

From boatanchors@theporch.com Wed Jan 8 01:42:50 1997
From: DCPIN@aol.com
Subject: re:Viking tuner question
Message-ID: <970107205839_678785505@emout17.mail.aol.com>

Someone suggested to me this could be an MBII, a predecessor to the MBV-a, a fairly new piece of gear.

Thanks for the help

Chris KO4QW

From boatanchors@theporch.com Wed Jan 8 12:04:14 1997
From: "Terry O'Laughlin" <terryo@wort-fm.terracom.net>
Subject: WARAC Swapfest
Message-ID: <199701081536.JAA23483@mendota.terracom.net>

I was asked for directions to the WARAC swapfest and my reply bounced.
I hope that posting the directions to the whole list won't offend anyone.

>How do I get there from Glen Ellyn, Il. West of Chicago Who do I call
>for directions??

I don't have a flyer for it but I've been there so often here goes:

At Milwaukee, take the I-894 bypass around the city (not strictly necessary but saves time). Get back on I-94 at the end of the bypass (labelled "Madison"). They changed the highway number for the exit. It used to be "F" but now I believe it is "J". Anyway, look for the exit that has the Waukesha Airport. (Not on the exit sign proper, but the little advisory signs for things like airports, hospitals, museums...)
The Expo grounds are on the same land as the airport, tucked into the southwestern edge. You take the airport exit and go south (left, coming from Milwaukee). Go through the first stoplight at the top of the hill. The airport will be plainly visible on your right. Drive past the airport and go right on the first road past the airport.
The Expo center will be on your right about 3/4 mile down that road.

They have a 2m talk-in and they usually have some road signs out after you leave the freeway, but the signs are often small. It is not hard to find because of it's proximity to the airport.

73   Terry O'   WB9GVB

From boatanchors@theporch.com Wed Jan 8 12:04:14 1997
From: bgraham@tecnet1.jcte.jcs.mil
Subject: Re: What is a TT-4?
Message-ID: <199701080758.BAA27094@uro.theporch.com>

Dear OM,

The TT4 is a fairl small TTY machine with keyboard and printer which was indeed made by Klienschmidt. They weren't too bad in their day but have been around a very long time.

Bill

From boatanchors@theporch.com Wed Jan 8 12:04:14 1997
From: Cormac Thompson <cormac@televar.com>
Subject: WHAT IS RME10-20?
Message-ID: <32D3A7CF.AE8@televar.com>

Hi again gang:

What is an RME HF10-20? What does it match up with and does anyone have a manual or copy for the unit? Also, assuming a working condition and appearance of 9, what is something like this worth, realistically!

Came by this in the purchase of an entire shack of an nursing home bound ham yesterday. It is, unfortunately, the most vintage piece of gear left in the shack, except for an immaculate old Hammarlund speaker.

Any help on this one would be appreciated. Thanks.

73, Cormac, W7JHS, Prosser, WA
cormac@televar.com

From boatanchors@theporch.com Wed Jan 8 21:53:05 1997
From: Tom Norris <badger@telalink.net>
Subject: Who needed RS-6 "spy set" info?????
Message-ID: <3.0.32.19970108200016.006e8300@telalink.net>

I had a crash, and lost some of my archived messages -
someone had asked late last week or so about info on
an RS-6 set.

I found the info, so drop me a note if you still need it.

Visit my web site with info on military communications gear:
HTTP://telalink.net/~badger/millist/index.html

Am in the middle of reorginazing this page, so if you see any
glaring (or not) errors, lemme know!

****
 Tom Norris KA4RKT
 badger@telalink.net   Nashville, Tennessee, USA
 thermionic@techie.com

****

From boatanchors@theporch.com Wed Jan 8 21:53:05 1997
From: w5jv@juno.com (J. Douglas Hensley)
Subject: Who sells 9 pin octals?
Message-ID: <19970108.201730.7071.53.w5jv@juno.com>

Several weeks ago two sources were mentioned
for obtaining the 9 pin octal females used to fashion
power cords for Collins gear. Would someone
please repost those sources or email them to me?

I am still going through my BA archive and have
located the now easy to find 8 and 11 pin standards.
But where do we find 9 pin?   Thanks in advance.

Doug

From boatanchors@theporch.com Wed Jan 8 21:53:05 1997
From: pmills@A.crl.com (Phil Mills)
Subject: Re: Who sells 9 pin octals?
Message-ID: <199701090245.AA01435@A.crl.com>

Call Fred Schmidt at Typetronics, 954-583-1340. You can either reach him or
his answering machine
during the days....he does travel to hamfests in the SE U.S. with his tubes
and such. I have bought
tubes from him by phone on several occasions and have been very pleased with
his service.

good luck & 73,
Phil

>Several weeks ago two sources were mentioned
>for obtaining the 9 pin octal females used to fashion
>power cords for Collins gear. Would someone
>please repost those sources or email them to me?
>
>I am still going through my BA archive and have
>located the now easy to find 8 and 11 pin standards.
>But where do we find 9 pin?   Thanks in advance.
>
>Doug
>
>

Phil Mills, AB5TH   *****   *****
pmills@a.crl.com
281-992-5762 days
Friendswood, TX   (south of Houston)

From boatanchors@theporch.com Wed Jan 8 01:42:50 1997
From: bharris@smtphub.scs.philips.com (Brian Harris)
Subject: Wishful Thinking
Message-ID: <2d2edb70@scs.philips.com>

I would like to find the following:

1. All the sheet metal pieces for a Johnson Desk KW pedestal and, hopefully, the optional desk to go with it.

2. A Swan 260 parts rig or the cabinet and final compartment cover for one.

3. A cover for a Johnson 500 power supply/modulator.

4. Both meters for a Johnson Thunderbolt.

5. A cabinet for a 32V3.

6. A cabinet for an R-388.

7. A modulation transformer for an Apache TX-1

Thanks for reading,

Brian Harris - WA5UEK - proud owner of the AF-100 featured in CQ's 1997
Classic Calendar (February) and an Electric Radio article (February 1996).

From boatanchors@theporch.com Wed Jan 8 01:42:50 1997
From: Hans Jense <jense@eos.arc.nasa.gov>
Subject: WTD: manual for Knight KG-600C tube tester
Message-ID: <199701072249.OAA13057@eos.arc.nasa.gov>

A colleague of mine just presented me with one of the above mentioned tube testers. It is very clean, complete, claimed to be working, but is lacking the manual. I've already checked the websites of A. G. Tannenbaum, W7FG, and The Raymond Sarrio Co. to no avail. Would anyone have such a manual lying around that he or she would want to part with?

-- Hans Jense

```
============================================================================
Dr. G. J. Jense          |         Command & Control and Simulation Division
Senior Scientist         |            TNO Physics and Electronics Laboratory
Virtual Environments     |                        The Hague, The Netherlands
----------------------------------------------------------------------------

                         Currently on leave at:

 _           _    _______      _
| \    |    / \  /            / \        Human and Systems Technology Branch
|  \   |   /   \ \_______    /   \                 NASA Ames Research Center
|   \  |  /     \        \  /     \                Code AFH, Mail Stop 262-2
|    \_| /       \_______/ /       \            Moffett Field, CA 94035-1000


                         Phone: (415) 604-1877
                         Fax:   (415) 604-3729
                         Email: jense@eos.arc.nasa.gov

============================================================================
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From boatanchors@theporch.com Wed Jan 8 12:04:14 1997
From: "Paul Bock" <pauboc@smtplink.pulse.com>
Subject: WWV???
Message-ID: <9700088527.AA852745092@smtplink.pulse.com>

For the past three nights I've been tinkering with an R-4A, and when I checked one of the accessory bands (9.5-10.0) I couldn't find WWV at 10 MHz and at first assumed the crystal was wacky. However, I checked using the sandbox and the big antenna upstairs and WWV is barely audible, way, way in the background. I rechecked with the R-4A and the smaller antenna and yes, it is in there somewhere down at the noise level. What gives? Funky propagation? Something amiss with their 10 MHz transmitter/antenna? 40 meters works FB, and I hear lots of SW BC in the 9.5-10 band.....and 5 MHz WWV seems OK.

73,

Paul, K4MSG

From boatanchors@theporch.com Wed Jan 8 12:04:14 1997
From: "James C. Owen, III" <owen@apollo.eeel.nist.gov>
Subject: RE: WWV???
Message-ID: <43301.owen@apollo.eeel.nist.gov>

In message Wed, 8 Jan 1997 08:41:58 -0600 (CST),
"Paul Bock" <pauboc@smtplink.pulse.com> writes:

What gives? Funky propagation? Something amiss with
> their 10 MHz transmitter/antenna? 40 meters works FB, and I hear lots
> of SW BC in the 9.5-10 band.....and 5 MHz WWV seems OK.

> Paul, K4MSG
>

It's lack of propagation in the evening Paul. The MUF is just at or below 10 Mhz right now and even with the power that WWV runs is just barely enough to overcome path loss. I have found that the critical frequency is now not even getting to 4 Mhz, most of the time (last 3 Months) and 20 meters for state side drops about 22-2300 UTC and 40 is pretty weak by 0000 UTC. Give the SUN another year and the propagation should come back up. 73 Jim K4CGY,

From boatanchors@theporch.com Wed Jan 8 12:04:14 1997
From: Bob Roehrig <broehrig@admin.aurora.edu>
Subject: Re: WWV???
Message-ID: <Pine.ULT.3.95.970108105602.15040A-100000@admin.aurora.edu>

On Wed, 8 Jan 1997, Paul Bock wrote:

> For the past three nights I've been tinkering with an R-4A, and
> when I checked one of the accessory bands (9.5-10.0) I couldn't find
> WWV at 10 MHz and at first assumed the crystal was wacky. However, I

Yup - funky propagation is the problem. Same here in Illinois. 2 nites ago, I heard the time station in Caracas Venezuela on 5 MHz giving WWV a hard time too. Never heard them before.

E-mail broehrig@admin.aurora.edu   73 de Bob, K9EUI
CIS: Data / Telecom   Aurora University, Aurora, IL
630-844-4898 Fax 630-844-5530

From boatanchors@theporch.com Wed Jan 8 12:04:14 1997
From: w2ec@VNET.IBM.COM
Subject: RE: WWV???
Message-ID: <199701081756.LAA14044@uro.theporch.com>

> What gives? Funky propagation? Something amiss with
>> their 10 MHz transmitter/antenna? 40 meters works FB, and I hear lots
>> of SW BC in the 9.5-10 band.....and 5 MHz WWV seems OK.
>
>It's lack of propagation in the evening Paul. The MUF is just at or below 10
>Mhz right now and even with the power that WWV runs is just barely enough to

I can tell you exactly where the MUF was in NY about 0230Z on 07 JAN 97. It was at 12.148mc! I had been crank-tuning my RBC-3 up to 14mc to see if we were getting the same great conditions on 20 meters as we had last week. As I'm listing to all the stations wiz by, all of a sudden my receiver seemed to go dead. Virtually no sound except background hiss. I actually looked up at the DC plate meter to see if maybe I'd lost the B+ but the meter was right up there at 200vdc. I started cranking the tuning back down and about 12.1mc the receiver came alive again. Sure enough, rocking the tuning control from 12.0 to 12.2 turned the signals on and off just like a switch. At first I thought something was wrong with the RBC, but for the heck of it, blew the cobwebs off the TS-940 and checked the band with it. Same thing! Band alive around 12.0mc and dead when it reached 12.2. Actually, I tuned around and found some stations (CW and RATT) around 16mc, but virtually nothing between 12.2mc and 15.8mc. Careful tuning with the TS-940 (can't get accurate frequency readout with the RBC, but using the logging scale to return to a desired frequency is dead on) showed the last station heard as an unknown CW at 12.148mc. I could hear it on both the RBC and the TS-940. Above that, nothing until reaching 16mc. Strange propogation days indeed!

73, Ray W2EC

From boatanchors@theporch.com Wed Jan 8 12:04:14 1997
From: lkayser@rideau.net (Larry Kayser)
Subject: Zener Diodes as protection devices
Message-ID: <199701081408.JAA29775@mail.peterboro.net>

Jim es the group:

>Maybe this has been mentioned already, but I don't recall seeing anyone

>discuss series connected back-to-back zener diodes as front end protection.

The very popular sand state device, 40673 used to have zener protection on the Gate 1 and Gate 2 leads as I remember it.

The one issue was that the zeners had very high capacity, all things being relative, and that they were very slow, again all things being relative. If I remember right the speed of action was the big drawback. I do remember we tried using Zeners as clamps on DC rail voltages and had to go to an SCR family type of device as the Zener was just to slow to do the job.

Larry
va3lk / wa3zia

From boatanchors@theporch.com Wed Jan 8 01:42:50 1997
From: John Kolb <jlkolb@cts.com>
Subject: Re: [VSS:1141] Filters for Heathkit SB-313
Message-ID: <Pine.SCO.3.91.970107193403.27594B-100000@sd.cts.com>

On Tue, 7 Jan 1997, Gary H. Harmon, Jr. wrote:

> Received a beautiful SB-313 Solid State SWL receiver today. Mint condition
> with original manual. Unfortunately, it only has the standard 5.0 kHz AM
> filter (p/n 404-314) described as follows:
>
> Any recommendations on what to look for or where??
>

The SB-313 and SB-310 SWL receivers came with a 5 kHz filter for AM. The optional AM filter for the ham band receivers SB-301, -303 was 3.75 kHz instead, so a useful trick is to find one of those if the receiver is to be used for serious SWLing. In the -310 I started serious SWLing with, I had a 5 kHz in the AM position, and rewired the mdoe switch to use the AM detector and the 3.755 kHz filter in the CW position.

John KK6IL